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62,61 1917
48th
ANNUAL CATALOGUE
SEEDS
BULBS
FARM SUPPLIES



F. H. EBELING
SEEDSMAN

RETAIL STORE 217 WARREN ST., SYRACUSE, N. Y. WAREHOUSE, 538-540 CANAL ST.

A WORD OF APPRECIATION

This makes the 48th year in which we have served Central New York people in helping them to make an annual success of their harvests.

The fact that the children and grandchildren of my first customers are now my regular patrons, proves that the house of Ebeling has not only won but has held the complete confidence of its customers.

For 48 years our policy has been to import, contract for and handle only the highest grade seeds, bulbs, and supplies for the farm, garden, greenhouse, lawn, dairy or poultry yard.

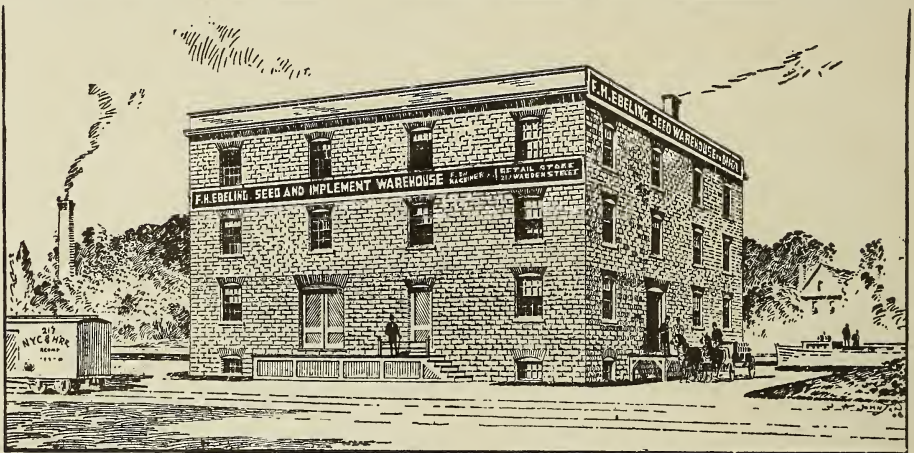
We wish to take advantage of this opportunity to thank you, the reader, for the kind words in our behalf that you have extended to your friends and neighbors. It is valued far more than the profits of the business to which it has contributed. As a result of your co-operation, the year just passed has proved most successful.

Assuring you that my heartiest hope is that this, my latest Catalog and Seed Book, will in turn more than do its share to make your 1917 the happiest and most prosperous of all years, I remain

Yours very truly,

January 1, 1917.

F. H. EBELING.



**F. H. EBELING'S SEED AND IMPLEMENT WAREHOUSE, 538-540 CANAL STREET
RETAIL STORE, 217 WARREN STREET**

USEFUL TABLES

Of Plants per Acre at the following distances apart.

ft. by 1	ft.	43,560	6	ft by 6	ft.	1,210
1/2	1 1/2	19,360	8	8	8	680
	1	21,780	9	9	9	537
	2	10,898	10	10	10	435
1/4	2 1/2	6,969	12	12	12	302
	1	14,520	15	15	15	193
	2	7,260	18	18	18	134
	3	4,840	20	20	20	103
	4	2,722	25	25	25	70
	5	1,742	30	30	30	48

Number of Plants Produced from 1 oz. of Seed.

	Plants		Plants
Asparagus	about 500	Kale	about 2,000
Broccoli	" 2,000	Leek	" 1,000
Cabbage	" 3,000	Lettuce	" 3,000
Cauliflower	" 4,000	Pepper	" 2,000
Celery	" 4,000	Sage	" 1,000
Egg Plant	" 1,000	Tomato	" 3,000
Endive	" 3,000	Thyme	" 5,000

SEED SOWN PER ACRE

Seed Sown per Acre	Weight per bu.	Seed Sown per Acre	Weight per bu.
Alfalfa, or Lucerne 20 to 30 lbs.	60 lbs.	Millet, Hungarian, 1/2 to 3/4 bu.	48 lbs.
Barley, 1 1/2 to 2 bu.	48 lbs.	Millet, Japanese, 1/2 bu.	32 lbs.
Beans, Field, 1/2 to 3/4 bu.	60 lbs.	Oats, 2 to 3 bu.	32 lbs.
Beans, Green Soy, 3/4 bu.	60 lbs.	Onion, 5 to 6 lbs.	56 lbs.
Beet, 4 to 6 lbs.	14 lbs.	Orchard Grass, 2 bu.	14 lbs.
Blue Grass, 2 bu.	14 lbs.	Peas, Field, 2 1/2 bu.	60 lbs.
Bromus Inermis, 20 lbs.	14 lbs.	Peas, Cow, 1/2 bu.	about 50 lbs.
Buckwheat, 1 to 1 1/2 bu.	48 to 50 lbs.	Peas, Wrinkled, 1/2 bu.	about 50 lbs.
Cabbage, 1 lb.	60 lbs.	Potatoes, 6 to 8 bu.	60 lbs.
Carrot, 2 1/2 to 3 lbs.	20 lbs.	Pumpkin Seed, 4 qts.	27 lbs.
Clover, Alsike, 5 to 10 lbs.	60 lbs.	Rape, Dwarf Essex, 4 to 6 lbs.	50 lbs.
Clover, Crimson, 15 lbs.	60 lbs.	Red Top, Reclenard, 15 lbs.	30 lbs.
Clover, Red, 10 to 15 lbs.	60 lbs.	Rye, 1 to 2 bu., Winter and Spring	56 lbs.
Clover, Sweet, 25 lbs. Melilotus Alba	60 lbs.	Sorghum, 1 1/2 to 2 bu.	56 lbs.
Clover, White, 10 to 12 lbs.	60 lbs.	Spinach, 8 to 10 lbs. Squash, 2 1/2 lbs.	
Corn, Ensilage, 1/2 to 3/4 bu.	56 lbs.	Sweet Vernal, 1 to 1 1/2 bu.	11 lbs.
Corn, Field, 1/2 bu.	56 to 60 lbs.	Timothy, 1/2 to 3/4 bu.	45 lbs.
Corn, Sweet, 1/4 bu.	about 45 lbs.	Turnip, 1 lb.	
Cucumber, 1 lb.	25 to 30 lbs.	Vetch, Hairy, drilled (plus 1 bu. small grain) 25 lbs.	60 lbs.
Lawn Seed, 1 lb to 250 sq. ft.	22 lbs.	Vetch, Hairy, broadcast (plus 1 bu. small grain) 75 lbs.	60 lbs.
Meadow Fesene, 2 bu.	7 lbs.	Vetch, Spring (plus 1 bu. small grain) 25 lbs.	60 lbs.
Meadow Foxtail, 3 bu.	18 lbs.	Wheat, 2 bu., Winter and Spring	60 lbs.
Meadow Grass, Rough Stalk, 35 lbs.	56 lbs.		
Flax Seed, 1/2 to 3/4 bu.	50 lbs.		
Millet, 1/2 to 3/4 bu.			

NON-WARRANTY.—F. H. Ebeling gives no Warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants he sends out, and he will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

EBELING'S EXTRA LAWN GRASS MIXTURE

This mixture will insure a beautiful, compact, evergreen sod on any lawn where the essential requirements of grass culture have been complied with. Its component parts are the grasses peculiarly adapted to lawns and door yards, including choice selected strains of Kentucky Blue, etc., along with the best known creeping or sod forming sorts. We have included a little white clover in the mixture, regarding it as essential. Full provision is made for a succession of growth, so that there shall be no break in the richness of the verdure from spring until autumn, and experience proves that Ebeling's Extra Lawn Grass Mixture is now perfect. Nothing better can be purchased on the American market, no matter what claims may be advanced by other seedsmen. This is because we employ the choicest and heaviest strains of grass seed in making the mixture. As to preparation of the soil, we recommend a thorough working and manuring to a depth of 8 or 9 inches, and a regular semi-annual application of top dressing afterward. It is a good practice to use Sheep Fertilizer and Ground Bone in the spring and fall; also, to renovate the lawn every spring with a little fresh seed. Per lb., 25c; Special price for quantity.



How to Make a Lawn

Have soil thoroughly spaded up, enriched with commercial fertilizer or well rotted manure, level and roll it well to make compact. Select a still, damp day for seeding; sow one-half of the seed from north to south and half from east to west, rake it over and roll again, when grass comes up re-seed the bare spots. When grass is 2 inches high cut it, and as necessary thereafter. Don't rake up short clippings, as they make a good mulch. Always thoroughly soak a lawn when sprinkling, whenever required, but never sprinkle lightly.

QUANTITIES TO USE

For 300 sq. ft.... 1 lb.
For 1500 sq. ft.... 5 lbs.
For 3000 sq. ft.... 10 lbs.
For one acre.... 100 lbs.

For renovating old lawns about half the above is sufficient.

GROUND BONE. Excellent for grass plots, gardens, etc. 5 lbs. 25c; 25 lbs. 75c; 50 lbs. \$1.25; 100 lbs. \$2.25.

SHEEP MANURE, PULVERIZED. (Wizard Brand.) A pure natural manure, unequaled for mixing with potting soil, for lawns, general vegetable and flower garden fertilizer. 5 lbs. 25c; 10 lbs. 40c; 25 lbs. 75c; 50 lbs. \$1.25; 100 lbs. \$2.50.

HARDWOOD ASHES. Indispensable as a lawn dressing, or to apply to orchards. Should be applied late in fall or early spring. 5 lbs. 20c; 10 lbs. 35c; 25 lbs. 60c; 100 lbs., \$2.00.

LAND PLASTER. Much used in composting or mixed with guano, etc. 100 lbs. \$1.00.

LIME (Hydrated). For lawn and field use where the ground has become sour. 40 lbs. 75c; 100 lbs. \$1.50.

BOWKER'S PLANT FOOD FOR HOUSE PLANTS. (Odorless.) The best Plant Food on the market. May be used either dry or liquid. Especially fine for ferns. Price, 15c per pkg.

BLOOD. (Dried.) One of the quickest acting fertilizers, being immediately soluble. 5 lbs. 30c; 25 lbs. \$1.50; 100 lbs. \$4.50.

SALT, AGRICULTURAL. For topdressing asparagus beds. Apply very early in spring at the rate of 800 to 1000 pounds per acre. 200 lbs., \$1.50; per ton, \$12.00.

CLAY'S FERTILIZER. This valuable imported manure is especially recommended to all who grow either fruit, flowers or vegetables and wish to bring them to the highest perfection. lb. 10c; 100 lbs. \$9.00.

SCOTCH SOOT. (Genuine Imported.) Gardeners know the value of the genuine article for stimulating a healthy growth of dark green foliage, and its beneficial effect in freeing the soil from slugs, grubs and cut worms. 28 lbs. \$1.50; 56 lbs. \$2.50; 112 lbs. \$5.00.

TOBACCO STEMS. An indispensable lawn covering for winter. It not only acts as a protector, but imparts large quantities of ammonia and drives away insects and moles. Bale, \$1.00 to \$2.00.

NITRATE OF SODA. A fertilizer for all crops. It is very quick in action and hastens maturity of crops fully two weeks. Being quickly soluble, it should not be applied until the plants are above ground. 5 lbs. 30c; 25 lbs. \$1.25; 100 lbs. \$4.75. Large quantities, prices on application.

Prices subject to change without notice.

SEED CORN SITUATION CRITICAL

A cold, wet season has retarded the growth of corn. This year's crop in many parts of the corn belt is immature, contains an excessive amount of water, and is unfit for seed. Scarcity of seed corn is the most serious in many years. There will be a short crop in 1917, and millions of dollars lost to the farmers, unless great care is taken in selecting the best matured corn for seed and storing it where it will not freeze.

EBELING'S HIGH GRADE SEED CORN

Compton Early A small eared, small kernelled yellow flint. Popular on account of its earliness and small kernels. Poultrymen, dove and pigeon growers like it for feeding purposes. Price, \$2.50 per bushel.

Early Yellow Flint This is the largest, handsomest Early Golden Yellow Eight Row Flint Corn we have ever known. Ripens ahead of the frost. Very prolific, kernels large, ears of good size, and of a most beautiful golden yellow. We will offer a limited quantity at \$2.50 per bushel.

Angel of Midnight A most popular extra early 8-row yellow flint corn. Ears of medium size, a splendid yielder for one so early. If you want a corn that will stand June planting, select the "Angel of Midnight," the farmer's friend. Stalks of medium size. Price, \$2.50 per bushel.

Longfellow This is very well named, being the longest eared 8-rowed yellow flint corn known. It is strikingly handsome, medium late and should be planted on rich soils. It is the most prolific of all the flint sorts. Very popular among corn raisers. Stalks are of good size. Price, \$2.50 per bushel.

Canada Smut Nose This good old standard sort is one that has stood the test of time, and is as popular as ever. It is an 8-rowed medium late with a splash of a reddish blush over the tip of the ear. Price, \$2.50 per bushel.

Sanford White Flint A splendid large long-eared 8-rowed sort. Sometimes called "Canada White Flint." with big white kernels, small cob, easy to husk and a great basket filler. One of the biggest yielding sorts known. Ripens rather late, likes rich soils, early planting, old-fashioned cultivating and hoeing, with the result that you have a growth like a young forest, and a yield fit for a king. Very popular in Northern New York. Price, \$2.50 per bushel.

Golden Nugget A splendid new variety. The largest and most prolific yellow flint corn grown. Ears 12 to 14 inches long, 8-rowed. It will outyield any other variety of flint corn. Over ninety bushels of shelled corn has been grown to the acre. Will mature in a normal season in New York State. Price, \$3.00 per bushel.

White Cap Yellow Dent This is an early yellow Dent, similar to Huron Dent, except that it has a white capped kernel which makes it look like a white corn. The grain with this exception is a beautiful yellow. A splendid planting corn. Its earliness permits it to ripen in New York State. Price, \$2.50 per bushel.

Early Huron Dent One of the best of the Dent varieties; ripening with the flint sorts and can be grown in this State with good results. Color, beautiful golden yellow, ears of medium size and an excellent kind to use where flint corn results are looked for. Price, \$2.50 per bushel.



Longfellow
Corn



"Bloody Butcher."

Bloody Butcher It's the earliest Dent corn—as early as the Pride of the North or the Flint varieties. The stock like it and one bushel will go as far as 1½ bushels of either white or yellow varieties. Worms and birds do not bother Bloody Butcher very much and for that reason it is much sought after by the southern planter. Color deep cherry red with white cap, generally 14 rows on a small cob. Stalks medium height, fairly heavy. Price, \$2.50 per bushel.

Early Eureka, or Champion White Pearl

Early, thoroughbred White Dent. Ears average sixteen rows, with very small cob; ripens in 90 to 100 days from time of planting. Very productive, yielding fully as well as the Yellow Dent sorts. Price, \$2.50 per bushel.

EBELING'S HIGH GRADE SEED CORN—Continued**Silver King or Wisconsin No. 7**

A Dent variety. Ears average 8 to 10 inches, always filled out to the tips, and very uniform in size and type. It pure white in color with good length kernels. A strong grower and early enough to mature as far north as St. Paul, and especially adapted to resist cool weather. Price, \$2.50 per bushel.

Golden Yellow Pop Corn

This extra sweet yellow pop corn is becoming very popular on account of its sweetness and tender eating qualities. We offer a limited quantity at 15c per lb.

White Rice

The most popular for home use. The grain is pointed, pops white, and full. A great yielder. It pops perfectly white, and a single kernel will expand nearly one inch. Price, 10c per lb.

EBELING'S HIGH GRADE ROOTS FOR STOCK FEEDING**Mangel Wurzel**

For stock feeding. We should learn a lesson from our brother farmers in Canada and Denmark and grow root crops much more extensively for stock feeding, which produce the greatest results for the labor and money invested.

Ideal Sugar Mangel Beet

See page 19 for the shape of this wonderful Mangel. It is a perfect chunk of a beet, being as large at the bottom as at the top. Stands two-thirds above ground. Is easily harvested even on hard soils. This new and original Mangel has been tested alongside thirty other Mangels and by strict laboratory tests on trial grounds and field demonstrations, has proven to be IDEAL and superior in quality. Per lb., \$1.25.

Mammoth Long Red

This is a heavy cropper and a large yielder. The roots grow from one-half to two-thirds above the surface, and are frequently two or more feet in length by six inches usual diameter. Dark, richly colored foliage, skin dark red, flesh white with veined rings of rose pink. Oz. 10c; ¼ lb. 20c; lb. 45c. For further particulars see page 19.

Detroit Dark Red

We believe this is the best beet for the market and home garden, and on account of its uniformly deep rich color the most desirable for canning. Tops small, upright in growth. Very smooth and of dark blood red color. Flesh is deep vermilion red, zoned with a lighter shade of the same color. The Detroit Dark Red Beet is used extensively by dairymen during milk testing periods. lb. \$1.25.

Long Orange Carrot

The most popular of the older Carrots for farm use on mel-low soil. An improvement obtained by years of careful selection of the best formed and deepest colored roots. One of the best of the sweet carrots for stock feeding, and a large yielder. Per lb. \$1.25.

White Belgian Carrot

Grows one-third out of the ground. Root white, green above ground, with small top. Flesh rather coarse. The roots are of large size and the variety is extensively grown for stock feeding. Per lb., \$1.00.

CANADA FIELD PEA

Is one of the very best soiling crops of the North. It is sometimes grown alone, but the most satisfactory dairy results come from sowing it with oats, rye or barley. It makes good ensilage, and is an admirable food either green or dry for cattle, being highly nutritious and rich in milk-producing elements. It is quite hardy and may be sown early in the spring, and will be ready to cut in May or June. The seed should be sown at the rate of 1 to 1½ bushels per acre. Per bu., \$4.50.

BUCKWHEAT

Market price changes. Write for quantity prices.

Buckwheat is mostly used for filling in fields remaining unplanted after the middle of June. It is well to bear in mind that on worn-out soils a plowed under buckwheat field is a great soil fertilizer and improver. Sow 1 bushel per acre.

Japanese

A popular and standard sort. Very large grains of dark brown color. Early and heavy yielding. Choice re-cleaned seed. Bushel (48 lbs.), \$2.00.

Silver Hull

A very prolific and early sort. Grain a light gray in color. A great favorite with millers on account of the white flour it produces. Choice seed. Bushel (48 lbs.), \$2.00.

SPRING RYE

Used with profit as a catch crop where grain has winter killed. Quite commonly employed within recent years. Sow 1½ to 2 bushels to the acre.

MARQUIS SPRING WHEAT

A wonderful new variety which has become very popular and met with widespread interest. It is remarkably early and exceedingly productive. Per bu., \$3.00.

SUDAN GRASS

Sudan is a tall, annual grass, reaching a height from 7 to 9 feet when planted in rows and allowed to mature for a seed crop; broadcasted and cut "in the bloom" for hay, about 4 feet. It dies each year like sorghum and millet and must be seeded each spring, so can never become a pest. It stools very freely, throwing out many stems from one crown. It is easily cured and handled as a hay crop. Sudan Grass is easily injured by frost, and therefore should not be planted until all danger of frost is past. It will produce under widely varying conditions at each cutting fully as much as millet and yield from two to four cuttings per year. Price per lb., 50c.

TESTIMONIALS

Frank Bradford, Skaneateles, N. Y., R. F. D. 3, says this regarding our Alfalfa:
 "Your seeds purchased this season were all as represented, and the Alfalfa was the finest I have ever seen. I sowed it with a bushel and a half of Oats to the acre, and when I cut the Oats the Alfalfa was as tall as the Oats, and now has a good start again."

Mr. F. H. Ebeling, Syracuse, N. Y. Clinton, N. Y., R. F. D.
 Dear Sir—I wish to say that the crops received from the seed purchased from you have been better than I anticipated owing to the wet spring we had in this section. We received an extraordinary large crop of ears on all corn, especially of the "Gold Mine" corn.
 WILLIAM BURGESS.

F. H. Ebeling, Syracuse, N. Y. So. Otselic, N. Y., May 1, 1916.
 Dear Sir—We have received your seed all right and are very much pleased with it.
 G. C. WEAVER & SON.

F. H. Ebeling, Syracuse, N. Y. Morley, N. Y., Oct. 2, 1916.
 Dear Sir—I enclose check for seed corn bought of you, and glad to say we had the best corn in our section this year.
 NORTHRUP BROS.

F. H. Ebeling, Syracuse, N. Y. Cazenovia, N. Y., Oct. 13, 1916.
 Dear Sir—The seed we received from you was certainly fine. We have a fine catch and no foul seed in it, and am very much pleased with them.
 HENRY STOKER.

F. H. Ebeling, Syracuse, N. Y. Cassville, N. Y., Sept. 5, 1916.
 The seeds arrived in fine shape and just as I ordered. I cannot speak too highly of your seeds and hope to do business with you in the future.
 EARL T. ROBERTS.

F. H. Ebeling, Syracuse, N. Y. Morley, N. Y., Oct. 9, 1916.
 Dear Sir—In reply to your letter I wish to say we have used your seed corn for two years, and both have been an extra successful crop. Last year our corn was a sight heavily eared and of heavy growth, but not woody or coarse. This year in spite of the bad year, it was well eared and said by people who had traveled over this section to be the best in St. Lawrence county. We recommend it to all farmers as a horse feed or for Silage.
 Respectfully yours,
 NORTHRUP BROS.

Frank Matty, Syracuse, N. Y., R. F. D. 1, who used one of our Standard Emerson 5-ft. Mowers last season, was very much pleased with its work. He says it cuts perfectly wet, heavy grass. Knives begin cutting the moment the horses start. Runs easy with less draft, less oiling, and no sore necks for horses. Under perfect control and would not be without it. Says this is the first machine ever used that does such splendid and perfect work.

William H. Gifford, farmer, Syracuse, N. Y., says that the Emerson mower works fine, takes less oil, does better work, handled easier and is well balanced, don't make sore necks for horses, easier draft, and a whole lot more might be said in its favor.

F. H. Ebeling, Syracuse, N. Y.
 Dear Sir—The Gould Monarch Sprayer, Fig. 1610, with 12-ft. bamboo extension, has given perfect satisfaction, giving a fine well distributed spray, even and close to a fog in fineness. Some of the trees are late in blossoming, and they will get another shower.
 Yours very truly,
 F. M. POWERS, Solvay, N. Y.

Mr. F. H. Ebeling, Syracuse, N. Y. Seneca Falls, N. Y., Dec. 18, 1916.
 Dear Sir—Having purchased seeds from you since 1879, I feel very confident in saying that your seeds are among the best that grow. For several years I have used your Iowa Gold Mine Ensilage Corn, and have had such good results that the past year I sold many bushels to my neighbors. The Alberta Cluster Oats yielded 65 bushels per acre. From four bushels of your Telephone Peas I picked 135 bushels marketable peas. I also have 50 acres of the best new seedling that I ever had, from your clover and timothy seed.
 Yours very truly,
 HENRY G. DAY,
 Farmer and Market Gardener.

Names of a Few Gardeners Who Have Dealt with This House Continuously from 32 to 47 Years.

Wm. Clark, Solvay.....	45 yrs.	Henry O'Neil.....	32 yrs.
Charles B. Day, Skaneateles.....	32 yrs.	John Butler, Onondaga Valley.....	43 yrs.
J. N. Rose, Syracuse.....	47 yrs.	A. H. Ballard, East Onondaga.....	34 yrs.
S. B. Babcock, Fulton.....	39 yrs.	Geo. Craddock, Onondaga, died 1912.....	43 yrs.
Albert Wright, Syracuse.....	47 yrs.	Henry Wright, Syracuse, died 1912.....	43 yrs.
Michael O'Brien, Syracuse, died 1913.....	39 yrs.	Henry G. Day, Seneca Falls.....	37 yrs.
William Lambert, Salina.....	38 yrs.		

Also hundreds of others who have dealt with us 8 to 30 years.

ALBERTA Cluster Oats

THE FAMOUS, HEAVY YIELDING, HARDY VARIETY FROM THE GREAT NORTHWEST

These oats were grown and shipped to us direct in car lots of about 2000 bushels, from that wonderful Alberta country of the Canadian Northwest. The soil is a deep, heavy, rich loam, free from foul weeds, and which produces the very best of all grain crops. These oats have captivated the modern grain-growing farmer in every part of the country because they have proved themselves a big success. It's well known that seed oats grown in the Alberta country are unequaled in hardiness, height, yield, vigor, in freedom from rust and from foul seeds. Canadian growers are extremely careful in seed selection and the Canadian government, through its rigorous seed laws, has greatly benefited our American farmers. It is safe to say that a more profitable variety of oats was never offered before in Central New York.

The two main handicaps in the growing of oats are foul weeds and the sowing of degenerated oats. Both problems are solved by our Alberta Cluster Oats. The virgin soils of the Canadian northwest are as yet free from the many foul weeds that affect our farmers, and these oats constitute a remedy for the farmers who have had trouble with their annual yield because they have continued to sow run-out and run-down sorts year after year. Alberta Cluster Oats compare with the majority of seed oats in the same way that a blooded Holstein compares with a common, scrub animal.

KERNELS MUCH FATTER—WEIGH 45 POUNDS TO BUSHEL

These oats yield from 75 to 100 bushels to the acre. They have big, strong, stiff straws that stand up well on any ground. Their spangled heads are 12 inches long and ripen early.

Because of the unusually bad season of 1916 it was an "off year" for oats, but we have had splendid results from our Alberta Cluster Oats, which have produced fully two or three times more than the common oats.

Here's an opportunity for you to sell to your neighbors at a good price these remarkable oats for next season. We suggest that you order early.

Price \$2.25 per bushel; in 10 bushel lots, \$2.00 per bushel; 25 bushels (or more), \$1.75 per bushel.

Erieville, N. Y., Dec. 13, 1915.

Mr. F. H. Ebeling.

Dear Sir:—Would say I liked the Alberta Cluster Oats I purchased of you last spring very much. I sowed 7 acres, 3 bushels per acre by weight, from which we threshed 392 bushels, which is 56 bushel per acre. The other kinds of oats near me yielded from 30 to 40 bushel per acre, and are not near as heavy.

I sowed Alberta oats with winter vetch.

Yours truly,

I. J. WALRAD.

Seneca Falls, N. Y.

Mr. F. H. Ebeling, Syracuse, N. Y.

Dear Sir:—Will say in regard to the "Alberta Cluster Oats" that I am very much pleased with them as they yielded beyond my expectation. I had 26 acres and had 1560 bushels, and weighed 40 pounds per bushel. The weather was bad to gather them and was obliged to cut them with the mowing machine and rake with a horse rake, and we surely left 10 bushels per acre on the ground.

Very truly yours,

W. D. HILL.

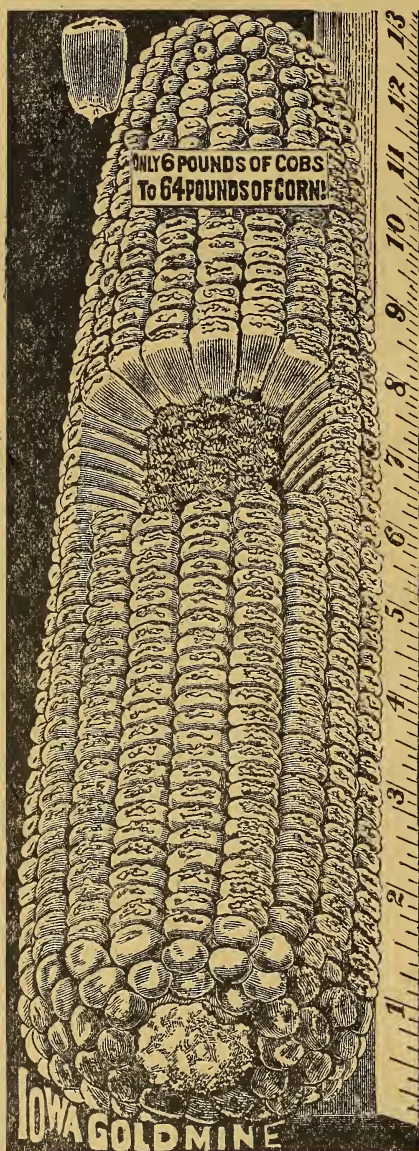
Geo. A. Courbat, Mallory, N. Y., sowed 30 bushels of our Wonderful Alberta Cluster Oats and grew one thousand bushels. This was a record-breaking oat crop for Oswego County, and which has never before been equaled.

You are welcome to write Mr. Courbat, who will gladly verify the above.

TO PREVENT SMUT IN OATS. Formula—1 pt. of formalin to 20 gal. of water, wet 20 bu. (or in that proportion) of oats with this solution, mix thoroughly by shoveling, then pile in a mound, cover up well with blankets, etc., for 12 hours. This forms a gas that will destroy the Smut germ. After 12 hours spread out the Oats to dry. They will then be ready for sowing.



Alberta Cluster Oats



IOWA GOLD MINE ENSILAGE CORN.

The Deepest Grained, Purest Yellow Corn Ever Grown. Every Year This Corn Puts Thousands of Good Gold Dollars in the Pockets of Our Customers.

Every year you have read in our catalog the extraordinary things we have had to say about our Iowa Gold Mine Corn. Every year our confidence in it has increased, and our only wish is that we knew how to make a stronger plea for this, the king in the corn family.

We honestly believe it is the biggest market producer and money maker on the American continent.

This real wonderful variety of corn grows 14 feet high and it matures with your field varieties. Of all ensilage corn known to modern seedmen this has the largest kernel and smallest cob. You will find the grain value to be almost double of the Leaming or Pride of the North because of their immense cobs and small kernels. Iowa Gold Mine Ensilage Corn possesses every desirable feature of the Leaming and Pride of the North and in addition the great grain producing quality we have told you about.

We earnestly advise you, the reader, to sow this corn this year and we know that you will be as enthusiastic as we are about this world-winning corn. Price \$2.25 Bu. Shelled.

LUCE'S FAVORITE DENT FIELD CORN

Luce's Favorite, Minnesota King, Early Triumph, Poor Man's Dent. These four varieties are all one and the same thing.

This variety combines the best in the Western Yellow Dent and Eastern (White) Flint of which it is a hybrid. It combines all the good points in the family stock in that its stalks are tall, slender with many wide leaves. The ear has a long small cob filled with large broad dented kernels flattened out to the size of your finger nail. You can plant it as late as May 25th and it will ripen with ordinary seed Flint sorts.

You will find Lucie's Favorite to be a strong growing bright yellow dented corn, which breaks off very easy in husking. It's the heaviest yielder you ever saw, the stalks often have two or three ears. It's extra good for fodder as the leaves are very broad and long. Like all hybrid of this class there are from eight to twelve rows to the ear. We have seen a bushel shelled that weighed 34½ pounds and equal to 69 pounds of shelled corn to 2 bushels of ears. Price \$2.50 bushel.

PRIDE OF THE NORTH IMPROVED LEAMING

85-Day Yellow

We believe Pride of the North will mature farther north than any other Dent corn. Strong, hardy, vigorous grower, can be planted thickly and still make good-sized ears. For husking crop it ripens early, dries out quickly, and is an all around very satisfactory kind. Pride of the North has a bright red cob, ears medium size, with deep kernel. Many of the stalks have two good ears. Price per bushel, \$2.25.

This variety was originated by a Mr. Leaming of Ohio and at once became a very popular and well known variety. It is probably more largely used in the East than any other variety for ensilage or fodder purposes. Stalks grow to good size, nine to twelve feet, and produce ears nine to eleven inches long, containing from sixteen to twenty-one rows of dark golden yellow grains. It is a late variety and will not mature in the northern states, unless the season is very favorable, but it is early enough to make it very valuable for an ensilage corn. Price per bu., \$2.25.



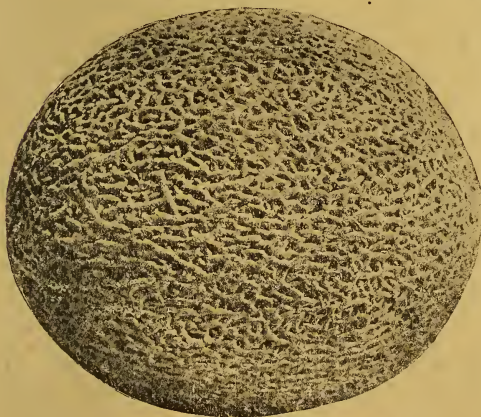
The above illustration was made from an actual photograph of a field of **IDEAL SUGAR MANGEL BEETS** grown on the Willowdale Farm, owned by Charles B. Day, of Skaneateles, N. Y.

IDEAL SUGAR MANGEL

Our illustration shown above faithfully indicates the shape and style of this Beet. It is a perfect Chunk or Boot-leg type of a beet, which makes harvesting easy, especially in hard soils, as it grows fully two-thirds above the ground. This new and original Mangel Seed is imported from Europe, and can be secured only from one grower who has brought it to its present perfection. In trial ground and laboratory test of over thirty varieties, the **IDEAL SUGAR MANGEL** has proven superior in each of the following points:

- It contains the greatest amount of dry substance.
- It contains the greatest amount of sugar, which means feeding value.
- This Mangel grows high above ground.
- It's easiest of all to harvest these Mangels.
- Under favorable conditions they sometimes weigh thirty pounds.
- Size, quality and yield are three important factors that no farmer can afford to overlook.
- Price, **\$1.25** per pound.

DELICIOUS GOLD LINED ROCKY FORD



This melon has proven all we claimed for it. Its popularity has increased and our sales have far exceeded our expectations. We have carefully inspected every strain and type of Rocky Ford Cantaloupe, and we believe this to be the very best type, for all purposes, that there is in existence. It is an ideal crate melon, fruits all being uniform throughout the fields, and loss from undersize and oversize is very small, and its quality can not be excelled. Medium size, solid net, gold lined next to a small seed cavity, excellent quality, vines hardy, thrifty and rust resistant. Sealed bag stock is made up of the highest class of selected fruits. General stock sells for less money than sealed bag stock. 15c oz., \$1.50 lb.

SOLID NET BURRELL'S GEM

This melon was offered by us for the first time last season. It is certainly a dandy! and we believe will supersedes all ordinary stocks of this popular melon. Its shape is better and its solid net gives it a more handsome appearance than the old style Burrell's Gem.



A Field of Early Medium Green Soy Beans, planted June 1st, and grown on the farm of Mr. S. F. Siefker, Manlius, N. Y.

Mr. F. H. Ebeling:

Manlius, N. Y., December 16, 1915.

Dear Sir—After a five-year trial with the early Green Soy bean, I am surely convinced of its great value as a soil improver. On soil that has been cropped with beans before, we find great masses of nodules on the roots of the beans, some as large as the ripe bean itself. This is a wonderful nitrogen extracting plant, returning humus and nitrogen to the soil in large quantities. We like to plant Soy beans in rows 28 inches, drilling about one bushel to the acre, about June 1st to 15th, and cultivate the same as for corn. This will insure generally a good seed crop. For soiling purposes on clean ground, two bushels drilled same as for grain will yield large growth of green feed for September.

Very truly yours,

H. W. SIEFKER.

Mr. F. H. Ebeling, Syracuse, N. Y.

Dear Sir—The Early Medium Green Soy Beans have proven to be all that I expected and even more. I planted a large field in drills and cultivated them the same as corn. These produced a fine crop, which were harvested and stacked up the same as Beans. I shall use the straw for feeding, which we consider as valuable as hay.

A large quantity of the Early Medium Green Soy Beans was planted with my Ensilage Corn and harvested with it and put in the silo. I consider Soy Beans a valuable addition to silage as it produces a higher grade than can be produced in any other way.

I would recommend them to all dairymen for their money value in increasing the flow of milk and keeping stock in fine, healthy condition. Yours very truly, CHAS. M. CROUSE.

Mr. F. H. Ebeling:

SHELTER VALLEY FARMS, R. M. Stone & Son, Proprietors.

Dear Sir—I wish to say that the Soy Beans bought of you to plant with our Eureka Ensilage Corn for Silage purposes, were entirely satisfactory. They not only grew large, but furnished a lot of splendid forage and more than fulfilled our best expectations by the manner in which the seed matured. We feel that the EARLY MEDIUM GREEN SOY BEANS with the EUREKA and STATE CORN mixed and grown together has proven a very fine combination of feed for silage purposes. Soy Beans are also readily eaten by cattle in the green state.

USEFULNESS OF THE EARLY MEDIUM GREEN SOY BEANS.—Soy Beans have a higher protein content than oil meal. Hay from them has a higher protein content than Alfalfa. The green fodder contains a higher protein content than either alsike or medium red clover. Add to this the fact that it is easily possible to secure two or three, or occasionally four to five tons of dry hay per acre; that from twenty to thirty bushels of seed per acre are frequently reported; that the plant is a legume and adds fertility to the soil fully as rapidly as the clovers or other legumes; that it will grow on soil too poor or acid for the easy success of Alfalfa; and you have a splendid combination, certainly qualities that are hard to excel with any of our cultivated crops.

No plant has a more useful range of possibilities than the Soy Bean. When one stops to think of the great feeding value of the grain, of the entire plant's being very valuable for forage, of its being a legume and a heavy gatherer of nitrogen to the soil, not difficult to grow or exacting as to the kind of soil it requires, we must realize that it occupies a position unique among all our crops. Not only is the grain as nourishing as oil meal, but it is as greedily eaten as corn and as easily digested as any grain. Moreover, there seems to be a tonic effect about the entire plant, and stock fed either the grain or the forage become full of energy as with no other grain.

Time of Planting and Cultivation.—Plow your land early in the spring. Prepare and cultivate the same as for corn, giving frequent harrowings to kill the weeds. Wait until corn planting time before planting the beans. Plant in with the corn or in alternating rows. Sow $\frac{3}{4}$ bu. to the acre. We advise planting in drills about 36 inches apart, 2 or 3 inches in the drill. Price \$5.50 per bushel.

Book on Soy Beans by W. F. Ingalls, a practical farmer, of Hamilton, N. Y., who has grown the Early Medium Green Soy Beans for many years, and is an authority on same. Price, 60 cents.

We offer a book on "Green Soy Beans," written by Mr. W. F. Ingalls, who was pioneer in the introduction of these Green Soy Beans. This is a practical and truthful description, and will enable any farmer to produce the same results that Mr. Ingalls did. Price 50 cents, bound in book form. We earnestly recommend this book to progressive farmers, and will mail book upon receipt of above price.



This picture shows the Garden Farm of Frank L. Scoville, Buckley Road, on Route 1, Liverpool, N. Y., which slopes to the south and shows the city in the distance.

Mr. Scoville has traded with us for over thirty years, as per testimonial following, and is one of the most successful market gardeners in this vicinity.

My Dear Mr. Ebeling:

I have dealt with you for so many years that I can hardly recall when I have not done so. It is certainly over thirty years when we began and have continued to do so ever since. The reason why is, that we have always found your seeds to be reliable, true to name and of good vitality. On this account you have earned the splendid reputation that your store bears in the community and wherever you do business. I would not be doing justice to myself, neither to you, were I to say anything different. Our success in gardening and farming depends so largely upon the seedsman that we could not afford to do business with a firm that failed us in these important matters.

You are welcome to use this letter in any way that you think best.

Jan. 27th, 1917.

FRANK L. SCOVILLE.

BARLEY

Sow $1\frac{1}{2}$ to 2 bushels if drilled; 2 to $2\frac{1}{2}$ bushels broadcast.

MANSUREY—A productive and reliable variety. The straw is stiff and strong, holding up well and bearing long heads, which are well filled with plump grains. It ripens early and is good for both feeding and malting. Write for price.

BEARDLESS BARLEY—Two row. This variety is free from beards, making it easier to thresh than other kinds and safer to feed to stock. It is a strong, vigorous grower, making short, heavy straw and bearing well-filled heads. Write for price.

CHEVALIER—Very productive, popular, and a fine, hardy 2 row type. Very plump and handsome in appearance and straw is stiff and strong. Write for price.

PUTTING GREEN MIXTURE

A careful study of the requirements for making the most substantial turf for Putting Greens developed the mixture herewith offered by us for this purpose. The varieties comprising it are all of the finest-bladed, low-growing and most hardy kinds, and maintain their rich, green color throughout the season. We also recommend it for terraces, embankments and steep slopes. Per qt., 35 cts., postpaid. By express or freight, at purchaser's expense, per qt., 30 cts.; 4 qts., \$1.00; peck, \$1.75; bushel (25 lbs.), \$7.00.

GOLF LINKS MIXTURE

Made from our own formula with the object of producing a turf which will stand rough usage. For Tennis Courts, Cricket Tables, Golf Links, Polo Grounds, this seed will give perfect satisfaction. Per qt., 20 cts., postpaid. By express or freight, at purchaser's expense, per qt., 15 cts.; 4 qts., 50 cts.; peck, 75 cts.; bushel (15 lbs.), \$3.00.

S. S. E. PLANT SUPPORTER

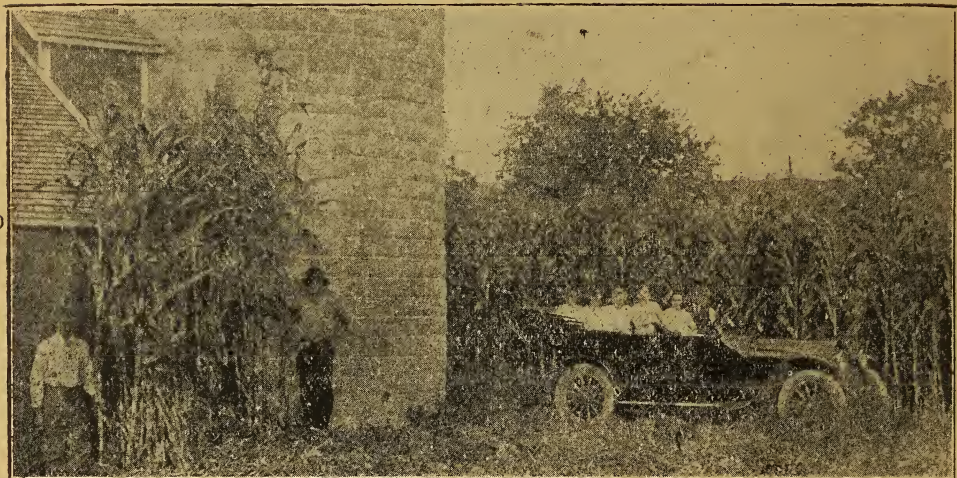
This plant supporter will prove very useful for tomatoes, roses, hydrangeas, dahlias, and all plants requiring proper support. They are adjustable, simple, well made and offered at a low price. None can afford to be without them. Can be adjusted to the height of any plant. Will increase the quality and quantity of tomatoes, keeping them from the ground and thus avoiding rot and other troubles.

The above cut represents the support, showing its practical simplicity, strength and cheapness. They are recommended by the best gardeners, also by Cornell University and many others.

Price, 15c each, \$1.50 per dozen.



EUREKA ENSILAGE CORN



The above picture shows a field of our GENUINE and CELEBRATED EUREKA ENSILAGE CORN; also the family of the grower, Mr. H. F. Daboll of Clyde, N. Y. This shows a wonderful growth of this celebrated variety which has produced such immense crops for our New York farmers. We are offering again our genuine Eureka Ensilage corn, which we have secured from our growers in Virginia, and is not to be compared with the ordinary Southern Horse-tooth variety which is often substituted.

This Wonderful Variety of Ensilage Corn was originated and grown under special supervision on the bottom lands of Virginia. It is especially famous for abundant leaves and extreme height. Some of you will remember having seen this variety at our State Fair exhibit three years ago. The corn measured 19 ft. in height.

This season we have been fortunate in securing another carload of this wonderful corn.

As it is grown beyond the frost line it insures a perfect seed stock, as our short season does not allow it to mature and our Northern soil produces an extremely heavy growth of stalks and leaves, which makes it especially valuable ensilage and nearly double in quantity.

Bear in mind that this is the genuine Eureka, not the common Southern horse-tooth variety—and remember that our stock will be exhausted early.

PRICE \$2.50 PER BUSHEL

WHAT SOME OF OUR CUSTOMERS SAY

Produces a wonderful growth of stalks, the tallest, most leafy and best for ensilage I have ever grown.—Isaac H. Broadhurst, Marcellus, N. Y.

Made a tremendous crop.—J. Grant Morse, Laurel Farm, Hamilton, N. Y.

Had two acres of Eureka corn and put in about 40 tons.—W. B. Sanborn, Hamilton, N. Y.

The Eureka corn we had of you this year was nearly shoulder high on July 19th and growing rapidly and will probably be 17 or 18 feet high when ready to put into our silo. We have used this for years and consider it one of the best for ensilage.

SEEBER BROS. Hastings, N. Y., Nov. 1st, 1915.

Mr. F. H. Ebeling.

Dear Sir:—I am pleased to say that the Eureka ensilage corn which I have had from you has proved more than satisfactory. The germination of the seed has been remarkably good, and the yield of corn for silage very satisfactory.

With our system of growing, the ears mature fairly well and make good sweet silage.

We are now cutting something over 160 acres of alfalfa each year. The first commercial seed which we purchased came from your predecessor, Mr. Perry, over 35 years ago, and we have had more or less seed from your store each year since. The fact that we have continued to make our purchases from you surely indicates that we have been well pleased with the seed and with the service you have given us.

Fayetteville, N. Y., December 13, 1915.

Yours very truly, F. E. DAWLEY.

Alfalfa--The BIG MONEY Crop

It has been said many times and in many different ways that there is more money in alfalfa than in other crops. However, large numbers of farmers have been discouraged in growing alfalfa because of weeds and because they have taken chances with inferior seeds. The truth is that alfalfa is very seldom run out by weeds. It's only the tender strains of seed that are affected. In Minnesota farmers even kill out Canadian thistle patches by seeding to alfalfa.

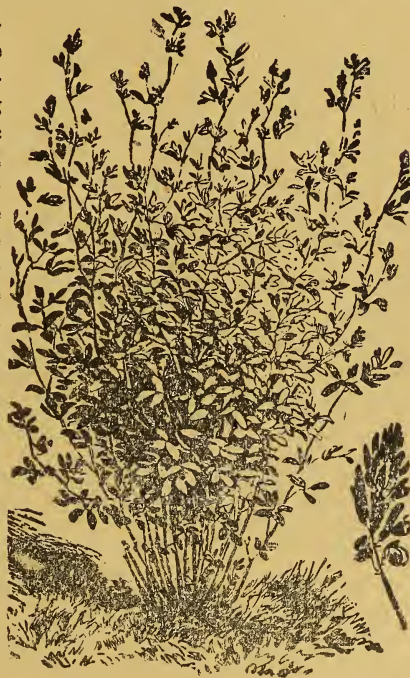
It's poor economy to gamble with unknown alfalfa seed when you can sow the seed grown in the great Northwest and have the results insured.

You have been warned by the U. S. Department of Agriculture against the purchase of commercial Turkestan and other inferior alfalfa seed, and you should profit by their advice. There are so many varieties and strains of alfalfa—probably more than of any other farm crop—and so many claims made for the various seeds that it is no wonder that some farmers become confused in making their selection. But isn't it logical and reasonable to believe that seed grown in a cold locality, which has survived so many handicaps but which has become world-wide famous, should be a seed safe to buy? The great Northwestern alfalfa has withstood all conditions which can be met with in Central New York and in any of our eastern states, and we firmly believe it is the hardest, heaviest-yielding and, from every viewpoint, the most productive and profitable alfalfa seed, and we are proud to be able to recommend it to our customers—and to supply them with it.

A very successful Central New York farmer has told us the method he has used in getting the finest stand of our alfalfa seed. We will pass it along to our readers. He states in part as follows:

"I plowed the ground about eight inches deep in the month of April, harrowed it the same way it was plowed, cross-harrowed it alternately each way, then I went over it with a ridging steel roller. The Alfalfa was put in with a disc drill set as deep as it would go, and the Alfalfa seed was sown ahead of the discs and was covered at least four inches deep. I followed the drill with a corrugated steel roller, leaving the ground as fine as any garden and packed closely. When the Alfalfa first showed through the ground it had roots four inches long. About the middle of August I pulled up some of the average plants, and the roots were nine inches long. The first of October I pulled up some more of the plants and the roots were 18 inches long. I think a good many farmers fail to get a start of Alfalfa, because—first, they do not sow enough seed to the acre; second, they do not put their ground in good shape and thoroughly packed; third, they sow the seed too shallow."

We have a carload of the famous western grown Alfalfa—Dodder free—which we do not hesitate to say is the finest ever received in Syracuse. We trust that our customers will avail themselves of this opportunity.



Alfalfa, or Lucerne

FOR DESTROYING DODDER IN ALFALFA FIELD

Use a spray consisting of four parts of water, one part of crude carbolic acid. Mix thoroughly in hot water. Spray this on the infected spots with an ordinary paris green sprayer. If necessary spray the second time. This will kill the dodder and save about 75 per cent. of the growing Alfalfa. I am indebted to J. C. Osborn, Port Byron, N. Y., for this valuable discovery.—F. H. E.

HAIRY OR WINTER VETCH. VICIA VILLOSA.

Makes One of the Largest Yielding and Most Nutritious Hay Crops Grown. Rivals Cow Peas in its Nitrogen Gathering Properties. A Splendid Soil Improver.

Hairy or Sand Vetch, as it is sometimes called, we consider is one of the best annuals grown for stock feed, soil improving products, and is a cover-crop in our orchards.

Our customers tell us that Vetch is better than clover for hay and it is superior to peas in easy curing. It gives a great abundance of nutritious food which the stock like very much. It gives fine results sown at last working of corn.

When used as a soiling crop an acre of vetches and oats, rye or winter wheat, will yield from six to eight tons of green fodder which is eaten greedily by all kinds of stock.

On Any Well-Drained Soil

Our Vetch will grow on almost any drained soil and is especially adaptable for sandy and thin soils, although, of course, it will produce heavier yields on a better class of soil.

When you prepare a soil for Vetch you should see that the pulverization is fine. Aim to have the ground firm and moist. Cover the seeds about the same depth as cereal grains.

Your Care of the Crop

Vetch is usually sown from about the middle of August to the first of October; or in the Spring, usually the latter part of April to the middle of May. You may sow it broadcast or with a grain drill, at the rate of 1 to 1½ bushels of seed per acre if sowed alone.

Pure cultures for inoculating seed may be obtained free of charge from the United States Department of Agriculture.

A bushel of rye, wheat or oats per acre is usually sown with vetch so as to furnish a support to keep the vines off the ground.

The vines are very difficult to cut when sown alone, but if you sow grain as a nurse crop you can cut the combination very early with the mowing machine or pea harvester.

Harvest and Use

Vetch should be cut for hay just when the pods are half formed. You may cut it for green feed at the time it is in full bloom. When it is properly cured vetch makes good hay, as its feed value is similar to clover.

It is adapted for pasturage purposes. It will produce forage very late in the Fall and early in the Spring. Sometimes it is used for ensilage in alternating layers with green corn. Like all other leguminous plants, vetch adds fertility to the soil and may be used in rotation with cereal and corn to good advantage. Spring Vetch, \$8.00 bu.; Winter Vetch, \$9.00 bu.



Hairy or Winter Vetch

QUESTION

Summary

ANSWER

1. How to Sow Vetch..... Mix with one bu. grain 25 lbs. vetch to the acre.
2. When to Sow..... When season and soil permits.
3. What Variety?..... Sow Winter Vetch in the Spring and Fall.
4. What Soil?..... Any soil—especially high, dry and sandy thin soils are especially adapted to it.
5. How much to the Acre?..... Twenty-five pounds with grain.
6. How Valuable as Compared with Hay?..... 25 per cent greater than Clover Hay.
7. How Valuable as Compared with Alfalfa?..... Three per cent greater.
8. How Valuable Compared with Ensilage?..... Four times greater.
9. Which is Best, Winter or Spring Vetch?..... Winter Vetch for Spring and Fall sowing.

EXTRA RE-CLEANED GRASS AND CLOVER SEED

Nothing is more important to the farmer than that the grass seed he sows should be pure and clean. The seed should also be plump, heavy and well ripened, so as to insure a good stand. First-class, thoroughly re-cleaned seed, while considerably more costly in the first place, is really much cheaper in the end than the light, chaffy grades generally sold at much lower prices—even should the latter be free from weed seeds. Heavy, plump seed, germinating better, will produce a much greater number of strong plants.

SUDAN GRASS. Sudan Grass is strictly an annual, and dies each year like millet, and must be seeded again each spring. This makes it fit into any system of rotation and affords a change in crop, which is a good thing for the soil. Sudan Grass is tall, reaching a height of from seven to nine feet, with very small stems, no thicker than a lead pencil. The plant stools wonderfully, and produces an amazing number of stalks from a single root. The hay crop is of great importance; stock prefer it to any other forage, and thrive on it. Produces good crops in time of drouth, and enormous ones in wet seasons. Price 50c lb.



Bromus inermis

BROMUS INERMIS. A hardy perennial, dark green soft grass, especially adapted to the dry and thinner soils. It forms a splendid grass for our Central New York farms, making fine pasture and good hay. It is one of the few really desirable grasses that can be depended upon for all around purposes. It is finer than Orchard Grass, sweet and nutritious, and sprouts out into fresh growth very naturally. Well adapted to high grounds, hills and sandy soil. It makes quick and strong growth, forming splendid pasture and hay,

weighs 14 pounds to the bushel. Sow three bushels to the acre. Price, \$3.00 per bushel.

It is a hardy perennial, dark green, grows on hills, dry and barren spots. It forms a splendid pasture and will grow where no other grass will thrive. Sow double the quantity of Blue Grass.

ORCHARD GRASS. (*Dactylis glomerata*). This is one of the most desirable pasture grasses for stock, and also for producing large crops of hay. It succeeds well in quite shady places, hence the name of Orchard Grass. Choicest re-cleaned seed, 14 lbs. to the legal bushel—but our seed is heavier; 3 bushels to the acre. Per lb., 40 cts., postpaid; per bushel of 14 lbs., about \$4.00.

TIMOTHY. (*Phleum pratense*). Of the easiest cultivation and with us is usually sown in connection with winter grain in the fall, to which a seedling of clover is added early in the spring. 45 lbs. to the bushel; from 12 to 16 to the acre. Per lb., 35 cts., postpaid; price per bushel, about \$5.00.

KENTUCKY BLUE GRASS. As is well known, this is the grass for which the State of Kentucky is famous and frequently in some sections of the country it is used in making lawns, although it is preeminently a pasture grass. When Kentucky Blue Grass is used for lawn purposes, the seed is generally sown at the rate of two and one-half to three and one-half bushels to the acre, and if White Dutch Clover is desired, seed should be added at the rate of one-half pound to one bushel of grass seed. Kentucky Blue Grass thrives best in well-drained or limestone soils. Legal weight, fourteen pounds to the bushel, and for pasturage it is customary to sow two and one-half bushels to the acre. Our re-cleaned seed weighs 20 pounds per bushel, and hence less than two bushels are required per acre. Per lb., 50 cents, postpaid; per bushel of about 20 lbs., \$3.50.

ENGLISH RYE GRASS. (*Lolium perenne*). This makes a quick growth very early in spring, and is adapted for cool, moist locations, recommended for fall seeding on Bermuda-grass lawns in the South, giving them a bright green appearance all winter. 24 lbs. to the bushel; 3 bushels to the acre. Per lb., 15c, postpaid; per bushel of 24 lbs., \$2.75.

ITALIAN RYE. (*Lolium Italicum*). This is distinct from the preceding, being of much larger and stronger growth, with large broad glossy-green blades. It succeeds best in moist, fertile soils. About 20 lbs. to the bushel; 3 bushels to the acre. Per lb., 15 cts., by mail, postpaid; per bushel, \$2.50.

RED TOP OR HERD GRASS. (*Agrostis vulgaris*). It is a most valuable addition to sow with timothy and clover to form a close sward for pasturage. About 32 lbs. to the bushel; 1 bushel to the acre; for lawns, 3 bushels to the acre. Per lb., 30c, postpaid; per bushel of 32 lbs., about \$10.00.

CRESTED DOGSTAIL. (*Cynosurus cristatus*). A valuable addition for lawn grasses which require close cutting and an ability to resist tramping, as in golf links, etc. 21 lbs. to the legal bushel; 1 to 2 bushels to the acre. Per lb., 40c, postpaid; per bushel of 25 lbs., \$7.00.

CREeping BENT. (*Agrostis stolonifera*). Especially adapted to moist lands and those which are occasionally overflowed. Its peculiar habit of branching underneath to the surface enables it to resist to the greatest extent tramping and pasturage. About 20 lbs. to the bushel; 2 bushels to the acre. Per lb., 45 cts, by mail, postpaid; per bushel of 20 lbs., \$7.75.

HARD FESCUE. (*Festuca durinsecula*). An excellent pasture or lawn grass, succeeding well in dry or shady locations. About 12 lbs. to the bushel; 2½ bushels to the acre. Per lb., 40 cts., postpaid; per bushel of 12 lbs., \$3.50.

SHEEP'S FESCUE. (*Festuca ovina*). Slender blades growing in close, compact clumps and from six to ten inches in height. About 12 lbs. to the bushel; 2½ bushels to the acre. Per lb., 40 cts., postpaid; per bushel of 12 lbs., \$5.00.

MEADOW FESCUE. (*Festuca pratensis*). A fine pasture grass. About 22 lbs. to the bushel; 2 bushels to the acre. Per lb., 60 cts., postpaid; per bushel of 22 lbs., about \$9.50.

TALL MEADOW OAT. (*Avena elatior*). A very valuable pasture grass. It is especially adapted for rather dry, light soils. About 10 lbs. to the bushel; 4 to 5 bushels to the acre. Per lb., 30 cts., postpaid; per bushel of 10 lbs., \$2.75.

WOOD MEADOW. (*Poa nemoralis*). An excellent pasture or lawn grass, desirable for planting under trees on the lawn. 14 lbs. to the bushel; 2 bushels to the acre. Per lb., 60 cts., by mail, postpaid. By express: \$6.00 per bushel.

ROUGH-STALKED MEADOW GRASS. (*Poa trivialis*). A valuable grass for moist soils or meadows, making excellent pasture or very nutritious hay. About 14 lbs. to the bushel; 35 lbs. to the acre. Per lb., 55 cts., postpaid. By express: 45 cts. per lb.; per bushel of 14 lbs., \$7.50.

MEADOW FOXTAIL. (*Alopecurus pratensis*). Closely resembles Timothy in growth, but has a soft, feathery head. It is a valuable pasture grass by reason of its rapid growth. About 7 lbs. to the bushel; 3 bushels to the acre. Per lb., 55 cts., postpaid; per bushel of 7 lbs., \$4.00.

JAPANESE MILLET. (*Billion Dollar Grass*). Japanese Millet is one of the most remarkable forage plants we have; remarkable for its marvelous, luxuriant growth, often growing six feet tall; remarkable for the immense amount of hay it produces from each acre, and remarkable for its feeding value. It is adapted to all sections; does especially well on low ground; makes more hay than German or any other kind of millet, and requires less seed per acre; produces a crop in a very short time; is relished as hay by stock of all kinds; or, if allowed to ripen, will yield about as many bushels per acre as oats. The seed can be used for feed, and is especially fine for poultry. Sow in May for best results, 15 to 20 pounds per acre. If desired for hay, cut just before it heads out; or it can be left to ripen and then threshed the same as timothy. Price, \$2.50 per bushel.

HUNGARIAN MILLET. (*Panicum Germanicum*). Seed can be sown early in July to produce a good crop of hay. To make the best hay it should be cut before the seeds become hard. 48 lbs. to the bushel; 1 bushel to the acre. Per bushel, about \$3.50.

GOLDEN OR GERMAN MILLET. This is the favorite variety for planting in good land to produce a large crop of hay or forage during the summer months; of very strong growth. 50 lbs. to the bushel; 1 bushel to the acre. Tennessee grown. Per bushel, about \$3.50.

DWARF ESSEX RAPE. A forage plant of highest value. It can be sown in April for an early crop, and for fall crop in July, August and September, and still later further south; it is sown broadcast 10 lbs. to the acre, but it is better drilled, in which case 5 lbs. to the acre will suffice. In a few weeks from the

time of sowing, sheep, hogs or cattle can be turned upon it; all reports agree that they gain weight faster on this than any other fodder, and as it can be sown after other crops are off, the gain in fodder is secured at a nominal cost. Stockmen, dairymen and farmers have proved its value. Per lb., 15c; 10 lbs., \$1.50; bushel of 50 lbs., \$5.50; 100 lbs., \$12.00.

SORGHUM, OR EARLY AMBER SUGAR CANE. This is the sorghum of the Northern States; makes the finest quality of syrup. The earliest and most productive variety. Height, 10 to 12 feet. For ensilage or fodder it possesses good qualities; stock of all kinds relish it. Sow 5 lbs. in drills, or 1½ bushels broadcast to acre. Per lb., 10c; bu. (56 lbs.), \$4.00.

WINTER VETCHES, OR TARES (*Vicia villosa*). Also called Sand Vetch, or Hairy Vetch. Recommended for fall sowing with rye, which serves as a support. It is perfectly hardy in all parts of the country, remaining green all winter and maturing fully four weeks earlier than Scarlet Clover; it can, therefore, be harvested or plowed under, and the ground used for the usual spring crop. Sow 25 lbs. with one bushel grain per acre. Price per bushel, \$12.00.

CLOVERS

ALFALFA, OR LUCERNE. (*Medicago sativa*). It strongly resembles clover in habit of growth and feeding value, but withstands drought much better. It is a perennial plant on well-drained soils, so that when once established, it will continue to produce large crops for twenty years when properly cared for, and on some of the rich western prairies yields four to five large cuttings in a single season. It must be cut every time it comes into bloom, and not allowed to produce seed if permanence is desired. The plant is quite hardy, but will not succeed on low wet soils. Sow from 20 to 35 lbs. per acre. Per lb., 40 cts., postpaid. By express or freight: 30 cts. per lb.; 10 lbs. at 28 cts. per lb.

ALSIKE OR HYBRID CLOVER. (*Trifolium hybridum*). The plant is perennial and very hardy, thriving equally well on wet or dry soils. The stems are more slender and much taller than those of the Red Medium Clover, and thus much better adapted for growing with Timothy to produce a high grade of mixed hay. Sow at rate of 10 to 20 lbs. to the acre. Per lb., 30 cts., postpaid. By express or freight: per lb., 30 cts.; 10 lbs. or more at 28 cts. per lb.

RED MEDIUM OR MAMMOTH. This is the common Red Clover so largely grown. We shall be pleased to quote prices at any time.

WHITE DUTCH CLOVER. (*Trifolium repens*). This thrives in almost every soil and climate, succeeding equally well on heavy, moist land and thin, dry hillsides. It is of low-creeping growth and for green, velvety lawns. Per lb., 45 cts., postpaid. By express, 60 cts. per lb.

SWEET CLOVER BOKHARA (*Mellilotus Alba*). This slightly resembles Alfalfa in growth, but is much taller, with leafier and stiffer stems. It frequently grows five to six feet in height and branches freely, with slender spikes of small, fragrant, white flowers, which afford an excellent food for bees. Used also for inoculating Alfalfa soils.

CRIMSON OR ITALIAN CLOVER. (*Trifolium incarnatum*). An annual variety providing large crops of green forage, or if cut while in bloom will make excellent hay. It should not be allowed to grow too old, or the seed-heads are liable to cause hair-balls to form in the animals' stomachs, to their great injury. It is for use as a green manure and cover crops that this plant is most highly esteemed. It improves poor lands and restores to fertility those worn by excessive culture. Seed should be sown early in August. Sow 15 lbs. to the acre. \$12.00 bu.

INOCULATION of these Clover Seeds means a stronger catch and better yield—see page 10.

THE RUSSET POTATO



A Field of Russet Potatoes which yielded 393 bushels per acre. Grown by W. L. Hoag, Tully, N. Y.

THE RUSSET IS A LATE POTATO of marvelous, robust habit of growth, the rich dark green vines cover the ground even when planted three feet apart each way, and in a dry season. Vines free from blight and not bothered with bugs. No potato known can match it in this respect. Yields enormously, producing six, eight, ten, and even twelve large-sized, round, shapely, white tubers, equal to the Rurals, Carmen or Raleigh, but a much larger producer. This potato is completely covered with a beautiful russet skin, and baked or boiled equal or superior to the best potato you ever ate. A trial of the **RUSSET POTATO** would convince you of the facts as stated above. Price per bushel, **\$3.50**. Special price for large lots.

Bordeaux Mixture for Potato Blight

3 lbs. blue vitriol, 4 lbs. lime, 50 gallons water. Slake the lime and strain it into the 50 gallons of water. Put the vitriol in a sack and put in a pail of water till dissolved; then mix with other. If bugs bother add $\frac{1}{2}$ lb. paris green. Spray once a week for six weeks.

Frank Gilson, Tully, N. Y., R. F. D. 1, has found a bug feeding on the potato bug. It has the appearance and size of a cricket with blue body, and head and neck orange. This bug destroys the potato bug and feeds on the eggs and the young bugs. This was first discovered in 1914 by a young German in his employ, who called Mr. Gilson's attention to it. In consequence of the activity of this bug, he has had little or no trouble from the potato bugs since then.

EARLY SEED POTATOES

Early Ohio.....	Per bu. \$4.00
Early Irish Cobblers.....	" 4.00
Beauty of Hebron.....	" 4.00

LATE SEED POTATOES

Rural New Yorker.....	Per bu. \$3.50
Green Mountain.....	" 3.50
Russet	" 3.50

Chinese or "Celery" Cabbage (Pe-tsai)

This cabbage from China has become popular in the markets and is a profitable crop. The heads grow much like very large Cos or Romaine lettuce. The leaves have broad, thick mid-ribs which blanch perfectly white. The heads grow from a foot to eighteen inches long and weigh five to eight pounds.

Seed should not be so wnin the North until after July 1, and later farther South. If sown early the cabbage quickly runs to seed and is worthless. It is best to sow the seed in rows two feet apart and thin the plants to fifteen inches apart. It does best if not transplanted. Oz. 35c; $\frac{1}{4}$ lb. \$1.00; lb. \$3.50.



Prices subject to change without notice.

Chinese Cabbage (Pe-tsai)

Spargel (Gr.)

ASPARAGUS

Sparagio (It.)

Culture—Sow early in spring in rows one foot apart; when one year old the roots may be taken up and transplanted in permanent beds, which should be made by taking out the soil to a depth of about 16 inches, fill in with six inches of well rotted stable manure, then six inches of soil somewhat firmed, and place the roots on the same about 10 inches apart with the roots well spread out and cover so that the crown will be about four inches below the surface. Keep the surface well raked to keep down the weeds until the shoots appear.

Palmetto

is earlier, a better yielder, and is more even and regular in its growth than Conover's. Oz. 10c; ¼ lb. 25c; lb. 75c.

Columbian Mammoth White

It furnishes white shoots which stay white as long as fit for use without earthing up or any other artificial blanching. Fine for canning. Oz. 10c; ¼ lb. 25c; lb. 75c.

Roots of above varieties, \$1.00 a hundred.

Bohnen (Gr.)

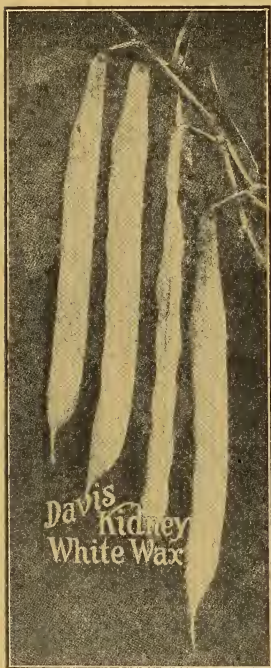
BEANS—Dwarf Wax Varieties

Faginoli (It.)

Culture—Beans should not be planted until the ground is warm, as cold and wet weather will cause the seed to rot. For garden culture plant four or five seeds in hills one foot apart, and the rows 18 inches apart. For field culture make the rows three or three and one-half feet apart, and cover with two inches mellow soil. Do not hoe or cultivate while the plants are wet with dew or rain, as getting the leaves bespattered with earth causes rust, which injures the crop.

Pencil Pod Wax

This comparatively new wax podded bean is particularly handsome, also medium early, hardy and very prolific. Leaves roughened. Pods long, five and one-half to six inches, straight, round, fleshy, and of a bright yellow color; tender, absolutely stringless and of excellent quality, and are produced through a long season. One of the best for home use and near markets. Seed long, round, medium sized; color solid black. Pt. 35c; Qt. 60c.



Davis
Kidney
White Wax

Davis Kidney White Wax

quality, stringless if picked when quite young; matures its crop late. Seed long, cylindrical, uniform in shape; color dull purplish red splashed with pale buff. Pt. 35c; Qt. 60c.

Grenell Rust-Proof Wax

Vines a little more upright and harder than the Golden Wax. The handsome deep yellow pods are about five inches long, broader and flatter than Golden Wax but slightly inferior in quality. Seed similar to our Golden Wax but darker. Very popular with some gardeners. Pt. 35c; Qt. 60c.

BEANS—Pole**Kentucky Wonder**

This remarkably vigorous growing, green podded pole bean has very long pods somewhat broad, very fleshy and quite stringless as snaps. The mature pods are often eight to nine inches in length. Seed medium sized, oval, flattened; very irregular, dark brown. The seed even from the most matured crops is usually somewhat shriveled in appearance. Its earliness and hardness commend it as a pole bean well adapted even for northern latitudes. Its very large green pods are certainly handsome in appearance and are unexcelled in quality by any green podded bean of its class. Pt. 35c; Qt. 60c.

Davis Wax

A very hardy and productive variety, desirable where a wax-podded, white seeded, mid-season sort is wanted. Vines very vigorous. Pods invariably long, six and one-half to seven inches, light yellow; seed kidney-shaped. Pt. 35c; Qt. 60c.

Wardwell's Kidney Wax

This variety maturing a little later than the Golden Wax, yields a large crop of long, nearly straight, broad, creamy white, handsome pods. These are of large size, about six inches long, and are of good quality; kidney-shaped, white with dark markings about the eye. Pt. 35c; Qt. 60c.

Keeney's Rustless Golden Wax

Vines strong and vigorous, with short runners. Pods produced in abundance; about five inches long, stringless, light yellow, wax-like and handsome. Seed similar to a light colored Golden Wax. Pt. 35c; Qt. 60c.

Currie's Rust-Proof Wax

Pods straight, rather flat, five inches in length, and of a light golden yellow; seed black. Pt. 35c; Qt. 60c.

German Wax, Black Seeded

This variety takes the place of the old black wax or butter bean and is much better in every respect. Vines medium sized, with small foliage, very vigorous, hardy and productive, maturing about midseason. Pods medium length, four and one-fourth to four and one-half inches, borne well up from the ground, curved, cylindrical, fleshy and of a clear, light golden yellow color, and remain a long time in condition for use as snaps. Seed small, oblong, jet black. Pt. 35c; Qt. 60c.

Round Pod Kidney Wax

This midseason variety is exceedingly handsome and very desirable, especially for snaps for the home garden. The vines are dwarf, spreading and very productive. The leaves are roughened. The pods are long and round, five and one-half to six inches, slightly curved, light yellow, wax-like, stringless and of the best quality. They are uniformly perfect, an ill shaped one being rarely seen. Seed long, cylindrical, medium sized, nearly white, with a little dark marking about the eye. Pt. 35c; Qt. 60c.

Hodson Wax

The vines of this variety are exceedingly vigorous, hardy and productive. The pods are handsome, clear creamy white, very long, six to seven inches, straight or slightly curved, flat but fleshy and of good quality. Seed long, cylindrical, uniform in shape; color dull purplish red splashed with pale buff. Pt. 35c; Qt. 60c.

BEANS—Dwarf Green Podded Varieties

Early Mohawk This sort is so much hardier than the others that it can be planted earlier and often will furnish beans fit for use before any other kind. Vines large, stout, with large, coarse, dark green leaves. Pods medium dark green, long, six to six and one-half inches, straight, coarse, flat, with long tapering points. Seed long, large, kidney-shaped, variegated with drab, purple and brown. Pt. 35c; Qt. 60c.



Burpee's Stringless Green Pod

Burpee's Stringless Green Pod A very desirable green podded snap sort for the home garden and largely grown for the market. The vine is vigorous, spreading and productive. The pods are medium green, five to six inches long, larger than those of the Red Valentine but are quite as fleshy, of equally high quality and remain crisp and tender longer. They mature a little later. Pt. 35c; Qt. 50c.

Extra Early Round Pod Red Valentine For snaps there is nothing superior to this variety among the dwarf green podded sorts both for the home and market garden and many prefer it to the wax varieties. Vines medium to large, erect, with dark green leaves. Pods medium length, about four and one-half inches, curved, cylindrical, with crease in back, very fleshy, crisp and tender. Pt. 25c; Qt. 40c.

Refugee, or 1000 to 1 Of compact growth and very prolific. The pods are light green, very solid and tender. Pt. 25c; Qt. 45c.

Dwarf Horticultural Vines very productive, compact, upright, with large leaves. Pods five to five and one-half inches come fit for use as green shelled beans early and in this condition the beans are very large, easily shelled and are about equal to the Lima in quality. One of the best sorts for green shell beans for home and market. Pa. 30c; Qt. 60c.

Round Yellow Six Weeks, Improved Round Pod While this does not differ from Early Yellow Kidney Six Weeks in size or general appearance of vine, pods are shorter, about four and one-half inches, much thicker, fleshier and mature earlier. Seed medium sized, round, light yellow with slightly darker marking about the eye. Pt. 35c; Qt. 60c.

BEANS—Dwarf or Bush Lima

Culture—Select land that is especially warm, rich, and well supplied with vegetable fibre or humus. Plant as soon as the soil has become warm in the spring. Make the rows 2 feet apart and give to each plant 6 inches space in the row. A top dressing of poultry manure, ashes, or some good fertilizer or compost around the plants will be of much benefit in hastening maturity and increasing the yield.

Dreer's Bush Lima A dwarf variety of the Dreer's Improved Lima. The beans grow close together in the pods, producing 3 to 4 and sometimes 5 in a pod, and are thick, sweet and succulent. Pt. 25c; Qt. 50c.

Burpee's Bush Lima True bush form of large white Lima, bush 15 to 20 inches high, 24 to 30 inches diameter, supported by its own thick stems. For productiveness and quality of beans it is not surpassed. Pt. 30c; Qt. 50c.

Fordhook Bush Lima An improved dwarf Lima of the Kumerle type. The plant is vigorous and erect growing, bearing well above the ground. The pods, which are produced in large clusters, are medium green, about four and three-fourths inches long, and each contain three to five large beans of exceptionally fine quality. It is much more productive than Kumerle and matures earlier. Seed large, irregularly oval in shape, very thick, white with greenish tinge. We consider this a decided acquisition to the dwarf limas, possibly the best of the class. Pkt. 10c; Pt. 35c; Qt. 60c; 4 Qts. \$2.00.

BEANS—Pole Lima

Ideal Pole Lima One of the largest and most valuable Lima beans yet introduced. Vines unusually vigorous, very productive, bearing large clusters of broad pods each six to seven inches long, and containing four to six large beans of most excellent quality. While the variety matures a little later than Seibert's Early Lima, the pods are much larger and no Lima grown is more attractive. Pt. 30c; Qt. 50c.

King of the Garden Lima Vines very vigorous and productive. Pods five to six inches long, filled with four or five immense white beans of the finest quality. On account of its large pods it is a favorite with market gardeners. It will come into bearing sooner and will make larger pods if not more than two vines are left to grow on a pole. Pt. 30c; Qt. 50c.

Seibert's Early Lima In earliness, ease of shelling, size, beauty and quality of the green beans, this variety is far in advance of all other early Limas for either the garden or market. The vine is vigorous, very productive and continues so from the very first to the last of the season; so that although the pods rarely contain more than four beans the total yield is enormous. Pods about five inches long. The green shelled beans are very large, very tender and of finest quality. Pt. 30c; Qt. 50c.

Jersey Extra Early Lima Large, early and productive. Pt. 30c; Qt. 50c.

Ruebe (Gr.)

BEETS

Barbabetola (It.)

The best results are obtained on a deep, rich, sandy loam. If wanted very early, sow such sorts as Crosby's Egyptian or Detroit Dark Red in hotbeds and transplant, cutting off the outer leaves. For general crop sow in freshly prepared soil as soon as the ground will permit, in rows eighteen inches apart covering about an inch deep and pressing the soil firmly over the seed. For winter use the turnip varieties may be sown in June so as to mature late in the season.

Extra Early Egyptian Blood Turnip

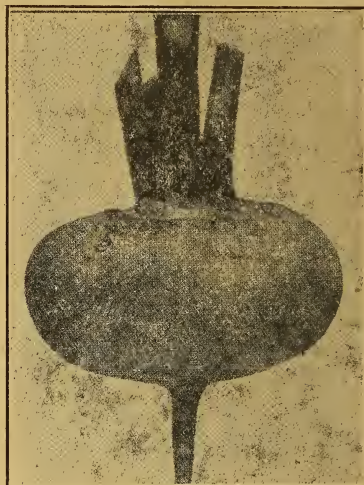
The best variety for forcing and excellent for first early crop out of doors, being very early with small tops. Root very dark red, moderately thick, a little rounded on top, distinctly flat on the bottom, and about two inches in diameter when mature. Flesh dark purplish red, zoned lighter shade. Oz. 15c; ¼ lb. 30c; lb. \$1.00.

Early Wonder or Crosby's Egyptian

The name of this variety is misleading, as it resembles the Egyptian only in its extreme earliness. Tops small. The beets are flattened globe shaped and very smooth. Exterior color of beet bright red. The flesh of our strain is bright vermilion-red, very sweet, tender and of excellent quality. It becomes fit for use sooner than any other variety. These beets mature so evenly that every beet can be pulled in two weeks. Oz. 10c; ¼ lb. 40c; lb. \$1.50.

Detroit Dark Red

We believe this is the best beet for the market and home garden, and on account of its uniformly deep rich color the most desirable for canning. Tops small, upright in growth. Very smooth and of dark blood red color. Flesh is deep vermilion-red, zoned with a lighter shade of the same color. Careful comparisons with all the prominent varieties on the market in this country and in Europe prove that the Detroit Dark Red Beet is the most uniform in shape and size and the most attractive in color. It is unsurpassed in quality. Oz. 15c; ¼ lb. 40c; lb. \$1.50.



Extra, Early Egyptian Blood Turnip

Early Eclipse

An early beet especially desirable for the home garden. Tops small. Root bright deep red, smooth, round. Flesh bright red, zoned with pinkish white; very sweet, crisp and tender. Oz. 10c; ¼ lb. 30c; lb. \$1.00.

Edmand's Early Blood Turnip

Tops short and rather spreading; ribs and leaf stalks dark red. Root nearly round; exterior color dark red, interior color purplish red with little zoning; crisp, tender, sweet and an excellent keeper. Oz. 10c; ¼ lb. 30c; lb. \$1.00.

Crimson Globe

A perfect beet in all respects; brilliant crimson in color, globe-shaped, with a very smooth skin, and an exceedingly small tap root, fine-grained, sweet in flavor, and tender at all times. The foliage is small, admitting of close planting. Not only a market gardener's sort, but one of the best for the kitchen garden, as it is extra early. Oz. 20c; lb. \$1.50.

Bastian's Early Blood Turnip

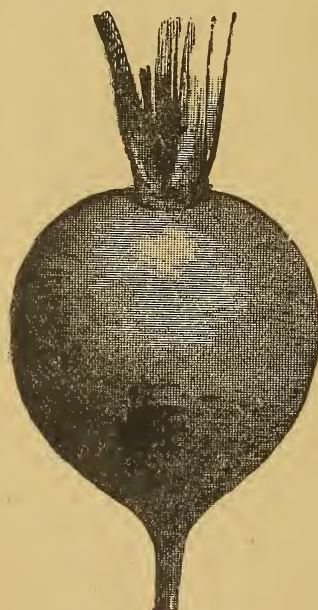
An early, bright red, turnip shaped beet of very good quality. Root thick, medium sized tap. Flesh light purplish red; crisp and tender. Oz. 10c; ¼ lb. 30c; lb. \$1.00.

Dewey's Blood Turnip

Tops medium sized; leaf stem and veins dark red; leaf green. Root dark purplish red, turnip shaped with medium sized tap. Flesh carmine with purple tinge. A medium early sort, tender, sweet and a good keeper. Oz. 10c; ¼ lb. 30c; lb. 90c.

Half-Long Blood

A fine variety for either spring or winter use. The roots are smooth, flesh bright red and quality excellent. For winter use the seed should be sown early in July. Oz. 10c; ¼ lb. 30c; lb. \$1.00.



Detroit Dark Red

Swiss Chard, or Sea Kale Beet

Belsskohl (Gr.) Bieta (It.) A variety of beet, juicy, tender, light colored leaves and leaf stalks, which are much superior to those of other beets for use as greens. Later in the season the broad, flat, wax-like leaf stems are cooked or pickled. This variety is worthy of a place in every garden. Known also as Silver or Spinach Beet. Oz. 10c; ¼ lb. 25c; lb. \$1.00

MANGEL BEETS, Mangel Ruben

Mangel Wurzels

For stock feeding. We should learn a lesson from our brother farmers in Canada and grow root crops much more extensively for stock feeding, which produce the greatest results for the labor and money invested.

Golden Tankard

A smooth, yellow fleshed Mangel. The roots are of large diameter, tapering quickly at the bottom, which is quite broad, with only a small tap-root. It grows largely above the soil and is easily harvested. It yields enormous bulk on good land and can be grown closely in rows. Oz. 10c; ¼ lb. 20c; lb. 50c.

Golden Giant, or Yellow Leviathan

Very fine large roots, growing one-half above the surface, which renders the harvesting easy. Skin a rich golden yellow, flesh pure white and sweet in flavor. It is a magnificent root easily harvested, producing enormous crops, and is a fine keeper. Oz. 10c; ¼ lb. 20c; lb. 50c.

Mammoth Long Red

This is a heavy cropper and a large yielder. The roots grow from one-half to two-thirds above the surface, and are frequently two or more feet in length by six inches usual diameter. Dark, richly colored foliage, skin dark red, flesh white with veined rings of rose pink. Oz. 10c; ¼ lb. 20c; lb. 50c.

Yellow Ovoid

The roots are of a true globe shape, from six to eight inches in diameter. Skin rich orange yellow, flesh white with lemon yellow rings. Sweet and solid. Oz. 10c; ¼ lb. 25c; lb. 45c.

Danish Sludstrup Mangel

This most wonderful Mangel is not so long as the Mammoth long red, it grows more above ground, is very easily harvested, and requiring but little exertion to pull same. They frequently weigh from 15 to 20 lbs. The Danish farmers prefer them smaller, 6 to 10 lbs. each, which is accomplished by allowing less space between rows. The smaller roots contain a higher percentage of dry matter, consequently the crop is more valuable. Oz. 10c; ¼ lb. 20c; lb. 45c.

Lane's Imperial

This beet will yield almost as much in bulk as the best Mangels, and contains a large percentage of sugar. Roots smooth, broad at the shoulder, gradually tapering to the base. Flesh snow-white. Oz. 10c; ¼ lb. 20c; lb. 45c.

Ideal Sugar Mangel Beet

The illustration faithfully shows the shape of this wonderful Mangel. It is a perfect chunk of a beet, being as large at the bottom as at the top. Stands two-thirds above ground. Is easily harvested even on hard soils. This new and original Mangel has been tested alongside thirty other Mangels and by strict laboratory tests on trial grounds and field demonstrations, has proven to be IDEAL and superior in quality.

Long Red Mangel

It grows high above ground. It contains the greatest amount of dry matter. It contains the greatest amount of sugar of any Mangel.

It grows high above ground.

It is very easy to harvest.

The IDEAL MANGEL has under favorable conditions weighed as high as thirty pounds.

Skin light yellow, flesh light yellow.

We have imported the IDEAL MANGEL from the originator in Germany for many years and this particular type can only be secured from this grower in Germany. Oz. 10c; ¼ lb. 35c; lb. \$1.25.

NOTE THE FOLLOWING TESTIMONIAL

"Syracuse, N. Y., Jan. 18, 1913.

F. H. Ebeling:

Dear Sir—I have grown Mangel Beets for years on my Homer Farm, but in recent years THE IDEAL MANGEL only, which I consider the most satisfactory, because of its large percentage of sugar, the ease of harvesting and the feeding results obtained. Last season I grew about four acres; yield 115½ tons of harvested Mangels. This year I intend to increase my acreage.

Yours very truly,

CHARLES M. CROUSE."

BROCCOLI

The heads resemble somewhat a coarse cauliflower and the culture is the same in all essentials as for that vegetable. Broccoli is well adapted only to those sections where the season is long, cool and rather moist. One of the most valuable features is that it withstands greater extremes of temperature than cauliflower.

Early Large White French

This is probably the most useful variety. Plants very hardy, vigorous and easily grown. Heads white, compact, hard and of good quality. Oz. 40c; lb. \$4.00.

Ideal Sugar Mangel Beet

Rosenkohl (Gr.)

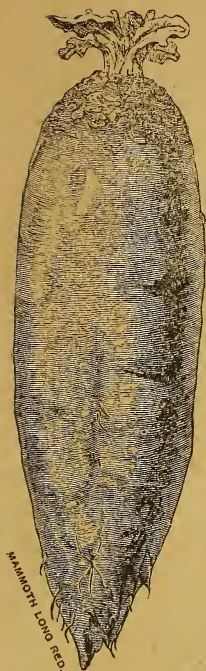
BRUSSELS SPROUTS

Cavoli di Bruxelles (It.)

This vegetable is used in the fall and early winter and by some considered more tender and delicious than any cabbage. The plant resembles the cabbage, the edible part being the numerous very small heads or sprouts an inch or two in diameter formed on the stalk at each leaf joint. Culture is the same in all essentials as for cabbage, except the leaves should be broken down in the fall to give the little heads more room to grow.

Improved Half Dwarf

Probably the most useful variety, plants growing one and one-half to three feet high, very hardy and giving compact, round sprouts of large size and good quality. Oz. 15c; lb. \$1.75.



CABBAGE, Kopf-Kohl

It is difficult to give definite cultural directions for cabbage, since it is possible to have good cabbage at all seasons of the year in some part of the country, and seed can be planted almost any time of the year. There are three good seasons for sowing the seed, however—in September for late Winter and early Spring cabbages, in March for Summer and Fall cabbages, and in June and July for Winter cabbages. The seed sprouts quickly, and is likely to come up very thick in the seed bed. It should be thinned early, or the plants become spindling, and then do not head well. Transplanted to the field, they should be put twelve inches apart, in rows eighteen inches apart. To prevent the heads splitting open in the field before they are ready to be harvested, the plants should be loosened a little at the root. Cabbages require considerable moisture, but too much water causes them to rot very readily.

Early Jersey Wakefield

Oz. 25c, ¼ lb. 75c, lb. \$2.50.

The best early cabbage in cultivation. Forms fine solid heads of good size, pointed heads with few outer leaves.

Copenhagen Market

This new Danish cabbage is the earliest Ball-shaped variety known. Heads very solid, of wonderful quality, with small cores and weighing from 10 to 15 pounds Oz. 40c; ¼ lb. \$1.25; lb. \$4.00.

Glory of Enkhuizen

This second early variety is very sure heading and of excellent quality. The plants are of vigorous growth, with large, rather spreading outer leaves which are noticeably curved and frilled. The heads are globular or very nearly round, very solid and of large size for so early a variety. Pkt. 5c; Oz. 25c; lb. \$2.50.

Early Winingstadt

Pointed head. An old and reliable favorite. So well known that a description is unnecessary. Oz. 25c, ¼ lb. 75c, lb. \$2.50.

All-Head Early

Our ALL-HEAD Early is of special value, having fine outer leaves, head very large, very solid, flat but very deep and uniform in size and shape. Fine for Kraut. Oz. 30c; ¼ lb. \$1.00; lb. \$3.00.

Flat Dutch

A fine, very large, late winter variety. Very popular on account of size, quality and yield. Oz. 20c; ¼ lb. 75c; lb. \$2.50.

Late Drumhead

One of the old-fashioned big-growing sorts. So well known that a de-



Early Copenhagen Market, from Photograph description is unnecessary. Oz. 25c, ¼ lb. 65c, lb. \$2.50.

Danish Ball-Head

The best cabbage for shipping and keeping qualities. Heads perfectly round, very hard, solid and deep and of fine white color, making them different in appearance from any other sort. Quality superior to all the cabbages, and the most profitable shipping variety known. Can supply this in short or long stem. Oz. 30c; ¼ lb. 75c; lb. \$2.50.

Henderson's Succession

The introducers say of this cabbage: "We consider it one of our most valuable contributions to horticulture. It would be classed as a second early variety, coming in a few days later than Early Summer, but it is superior to that variety. It is of nearly double the size, and is absolutely true to its type under all conditions. It is so finely bred that in a field of twenty acres every head appears alike." Oz. 25c; ¼ lb. 85c; lb. \$2.50.

The Hollander

This splendid cabbage is so near like the Danish Ball that it would be difficult to tell them apart. Splendid for its keeping and shipping qualities, thus enabling the grower to supply the late spring shipping market. Oz. 25c, ¼ lb. 85c, lb. \$3.00.

The Volga

A valuable acquisition to the cabbage family. The heads are as round as a ball, flesh firm and tender. It matures two weeks earlier than any other of our late growing sorts, and if set out early will mature in July and August. Especially fine for kraut. Oz. 25c; ¼ lb. 75c; lb. \$2.50.

Mammoth Rock Red

While late in maturing this has the largest heading of all the deep red varieties. Oz. 40c; ¼ lb. \$1.25; lb. \$4.00.

Red Drumhead or Large Red Dutch

Heads of large size, slightly rounded. Fine quality. Oz. 40c; ¼ lb. \$1.25; lb. \$4.00.

Globe Savoy

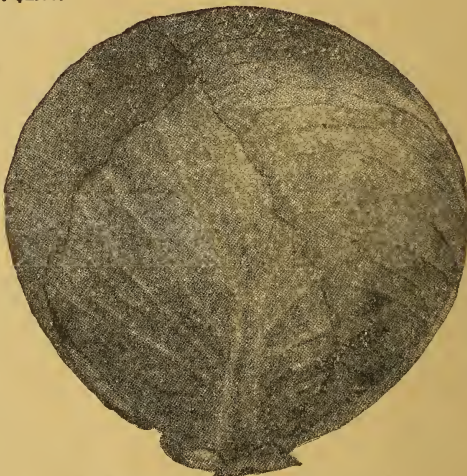
The earliest and sweetest of Savoys or curled cabbages. The head is round, solid. Leaves small, thick, fleshy and of fine deep green color. Excellent quality. Oz. 25c; ¼ lb. 75c; lb. \$3.00.

American Victoria Savoy

The best of the late Savoys for house use or for the market. The plant is robust with short stem. Is very much curled or wrinkled. A sure header of large size and the best of the Green Globe Drumhead Savoy. Oz. 30c; ¼ lb. 75c; lb. \$3.00.

Chinese or "Celery Cabbage"

See page 15. Oz. 30c; ¼ lb. 75c; lb. \$3.50.



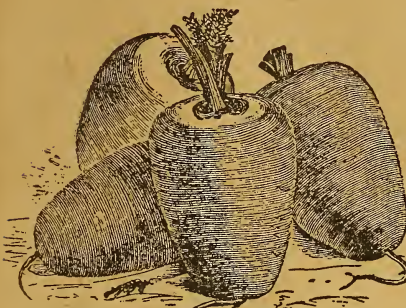
Danish Ball Head, from Photograph

Carotten (Gr.)

CARROTS

Carota (It.)

Carrots to grow to perfection require a deeply cultivated, rich and well pulverized soil. Sow early in the spring as soon as the soil is fit to work, in drills 15 to 18 inches apart, covering one inch deep, and press the soil firmly over the seed. If desired to cultivate with horse, make rows three feet apart.



GUERANDE OR OX HEART CARROT

Early French Forcing The earliest variety in cultivation and the best suited for forcing. Tops small, finely divided. The reddish-orange colored roots are nearly round. When fully matured they are about 2 inches in diameter, but should be used before they are full grown and while young and tender. Oz. 20c, lb. \$2.00.

Half Long Nantes Tops of medium size; roots cylindrical and smooth, bright orange; flesh orange, becoming yellow in center, but with no distinct core. Of the finest quality and one of the most symmetrical and handsome of the medium sized sorts; excellent for the market or home garden. Oz. 15c, lb. \$1.50.

Early Short Horn Excellent for early planting out of doors. Tops small, coarsely divided; roots top-shaped, but tapering abruptly to a small tap; skin orange-red. Oz. 20c, lb. \$2.00.

Guerande, or Ox Heart Tops small for the size of the roots which are comparatively short but often reach a diameter of 5 inches, terminating abruptly in a small tap root. Flesh bright orange, fine grained and sweet. This variety is especially desirable for soil so hard and stiff that longer rooted sorts would not thrive in it. When young excellent for table use, and when mature equally good for stock. Oz. 15c; lb. \$1.50.

Chantenay Tops medium sized; necks small; roots tapering slightly but uniformly stump rooted and smooth; color deep orange-red; flesh very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any, is a heavy cropper and is undoubtedly one of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort. Oz. 15c, lb. \$1.50.

James Intermediate A variety intermediate between the Danvers and Long Orange. It tapers to a point not so blunt as the Danvers and is more symmetrical and not so long as the Long Orange. Oz. 15c, lb. \$1.25.

Long Orange The most popular of the older sorts for farm use on mellow soil. An improvement obtained by years of careful selection of the best formed and deepest colored roots. Oz. 10c, lb. \$1.25.



CHANTENAY CARROT

Danvers Grown largely on account of its great productiveness and adaptability to all classes of soil. Tops of medium size, coarsely divided. The smooth and handsome roots are deep orange of medium length, tapering uniformly to a blunt point; flesh sweet, crisp, tender and of a deep orange color. Although the roots of this variety are short, they produce as large a bulk as the longer field sorts and are more easily harvested. Oz. 15c, lb. \$1.50.

White Belgian Grows one-third out of the ground. Root white, green above ground, with small top. Flesh rather coarse. The roots are of large size and the variety is extensively grown for stock feeding. Oz. 10c, lb. \$1.00.

Improved Short White We think this distinct variety is destined to take first rank as a field carrot, owing to its enormous productiveness and the ease with which it can be harvested. Oz. 10c, lb. \$1.00.



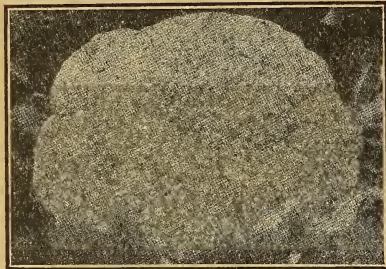
DANVERS CARROT

Blumenkohl (Gr.)

CAULIFLOWER

Cavolfiore (It.)

The Cauliflower delights in a rich soil and an abundance of water. Sow seed for an early summer crop in February or March in a hotbed. When plants are three or four inches high, transplant four inches apart in boxes or frames. In the middle of the spring or as soon as deemed prudent, the plants may be removed to open ground. Set plants from 2 to 2½ feet apart each way. For late Cauliflower sow the seed in a cool moist place about June 1st.



Early Snowball Cauliflower

Early Snowball

The most popular and profitable of the Cauliflower family. Heads of uniform size, snowy white, very tender, and owing to its attractive appearance a most desirable market variety. This seed is imported from our Denmark growers under contract, being the best known source for Cauliflower seed. Oz. \$2.00, ¼ lb. \$7.00.

Early Erfurt

Very similar to the Early Snowball, and by some considered equal to it. It is snow white, a sure header and worthy of a place alongside with the Snowball. Oz. \$2.00, ¼ lb. \$7.00.

Extra Early Paris

An excellent early sort, and under favorable conditions will produce splendid results. Not as sure a header as the Snowball and Erfurt. Oz. 50c, ¼ lb. \$2.00.

Sellerie (Gr.)

CELERY

Sedano (It.)

CULTURE.—Celery seed is slow to germinate, and ample time must be given. Sow thinly; cover lightly. Keep constantly moist. Count on about 7,500 plants per ounce of seed, or ¼ pound per acre. When the seedling plants are 3 inches high they should be clipped at the top, to favor stocky growth, or else transplanted. Celery is mostly grown under flat culture, without trenches, in rows 4 feet apart, 6 inches apart in row. For home use celery is often grown in double rows, 10 inches apart, without trenching, and banked for winter storage just where it grows, without lifting.

Golden Self-Blanching

This is the very best celery for early use. It is in condition as early in the fall as any, and we have yet to find an extra early sort equal in quality and appearance to our stock of **GOLDEN YELLOW SELF-BLANCHING**. Critical gardeners and consumers generally depend upon this variety to produce their best early celery. Plants of medium size, compact and stocky—with yellowish green foliage. As they mature the inner stems and leaves turn a beautiful golden yellow, so that blanching is effected at a small expense of time and labor. For beauty, color, crispness, tenderness, freedom from stringedness, added to a fine nutty flavor—it has no equal among the celery family. Oz. \$1.50, ¼ lb. \$5.00, lb. \$18.00.

Columbia

An early maturing sort, unsurpassed in shape and quality. Plants of medium height, but very stocky and heavy. The stalks are thick—almost round. Similar to the Giant Pascal. With color of a rich yellow tint. Like the Golden Self-Blanching and which it resembles when trimmed and bunched ready for market. The foliage of a light shade of green tinged with yellow. Follows the Golden Self-Blanching. Quality exceptionally fine. Some connoisseurs consider it equal to the Golden Self-Blanching. Oz. 75c, ¼ lb. \$1.50, lb. \$8.00.

White Plume

A handsome, very early sort. In great demand as a market celery, owing to its very attractive appearance. Requires a short time only for blanching. Leaves light green with tips almost white. As the plants mature the inner stems and leaves turn white, and require to be earthed up but a short time before they are in condition for use. While very attractive we do not consider it equal to the Golden Yellow Self-Blanching. Oz. 20c, ¼ lb. 75c, lb. \$3.00.

French Success

This keeps the best of any celery yet introduced. Compact growth and short stem, so that plants may be well earthed up for blanching while growing close together. Foliage dark green, heart large and solid and formed early. Stalks white and thick, very brittle and of splendid quality. Free from stringiness. This is one of the best of late varieties—remaining in perfect condition late into the spring. Oz. 30c, ¼ lb. \$1.00, lb. \$3.50.

Sutton's Superb Pink

English grown seed stock. Very crisp, sweet and tender. Favorite with the English gardener. The finest of all celery for family use. Oz. 75c.

Giant Pascal

A splendid green leaved late variety, fine for fall and early winter use. It blanches to a beautiful yellowish white color. Very solid and crisp and of a fine nutty flavor. Stalk of medium height, very thick. The upper portions nearly round. Splendid for fall and winter use, especially in the South. Oz. 25c, ¼ lb. 75c, lb. \$2.50.

Winter Queen

This is without question the most valuable variety of celery for winter and spring use, even excelling the celebrated **PERFECTION HEARTWELL** as a winter keeper. It is also much stouter, thicker and heavier with double the amount of heart of any known celery. Oz. 25c, ¼ lb. 75c, lb. \$3.00.



Golden Yellow Self-Blanching

CELERIAC, or GERMAN CELERY**Large Smooth Prague**

The best of all with a large smooth root of splendid quality. Pkt. 10c; Oz. 30c.

Apple Shaped

Not as smooth as the Prague, but of equal quality and good form. Pkt. 10c; Oz. 30c.

Turnip Rooted

This is the most popular and best known variety. Per pkt. 5c, per oz. 15c.

Cichorien-Wurzel (Gr.)

CHICORY

Cicoria selvatica (It.)

Witloof

Known in restaurants as French Endive. Sown in May and June in drills. Transplant or thin to 6 inches; treat as endive, except that late in summer or fall it should be gradually banked up like celery. The stalks, when blanched, make a delicious salad. Oz. 20c; lb. \$1.50.

Improved

Large leaves, suitable for greens. Oz. 15c, lb. 75c.

Large Rooted Sort

Used for coffee: Oz. 15c; lb. \$1.00.

Welschkorn (Gr.)

SWEET CORN

Mais (It.)

A rich, warm, alluvial soil is the best, but excellent sweet corn can be raised on any good, ordinary soil, if it is deeply and thoroughly worked before planting. In the North sweet corn should be planted as early as can be done without risking great loss from frosts or from rotting of the seed in the soil. If planted in rows, make the rows about three and one-half feet apart and place the seed fourteen to sixteen inches apart in the row, covering one inch deep with fine soil firmly pressed down. If planted in hills, make the hills for the early varieties three feet apart each way and plant six kernels to the hill. For the later sorts the hills should be not less than three and one-half feet apart each way. Hoe frequently, and when six inches high leave three or four plants in the hill. Give frequent and thorough but shallow cultivation until the tassels appear.

Mammoth White Cory

We consider this unquestionably the best extra early corn. Ears very large for so early a variety. Stalks about four feet high, each generally bearing two large, finely shaped ears which become fit for use as early as those of any variety in cultivation. They are twelve-rowed, six to seven inches long, very symmetrical and handsome, seldom with any opening between the rows at the base. Grain large, broad, very white and of remarkably good quality for such an early sort. The size and beauty of this variety give it ready sale even when the market is overstocked. Qt. 40c.

Crosby's Early

A most excellent early variety of fine quality. Ears five and one-half to six and one-half inches long, fourteen rowed or more, with short nearly square grains which are very white, sweet and tender. Plants about four and one-half feet high. This is the sort so largely grown in Maine for canning and it is the use of this variety rather than any peculiarity of soil that has given Maine sweet corn its reputation for quality. Qt. 50c.

Golden Cream

(Or Improved Golden Bantam). A distinct extra early variety. A cross between Golden Bantam and Country Gentleman. The ear is similar in appearance to Country Gentleman, but the color is rich cream, cooking to a light golden yellow. The flavor is rich, nutlike and delicious. The stalks make a rapid growth, producing from 2 to 4 ears each. This new variety possesses genuine merit and we recommend that all lovers of good corn give it a trial. Qt. 50c.

Golden Bantam

A beautiful golden yellow, sweet and tender. In season it comes in mid-summer about the time of Improved Champion. A most important point in favor of Golden Bantam is that it holds its quality longer after being picked than any other variety we have tested (one of the greatest advances in sweet corn in this respect in years). As a market variety for wagon or fancy grocery trade, Golden Bantam has many points in its favor. It is of merchantable size, and in addition it possesses superlative quality. Qt. 60c; 1/4 Bu. \$3.00.

Howling Mob

This corn originated in Ohio and it became so popular it was given the above name. The endeavor of the originator of this corn, was to get as large an ear as possible, early in the season and of sweet flavor. This corn is of strong and vigorous growth, from 4 1/2 to 5 feet high and has abundant foliage and generally produces to ears to each stalk. Ears measure 7 to 9 inches in length with 12 or 14 rows. The corn is pearly white, usually covered with a heavy husk which extends well over the tip of the ears which affords a good protection from worms and birds. Qt. 50c; Pk. \$2.75; Bu. \$10.00.

Kendel's Early Giant

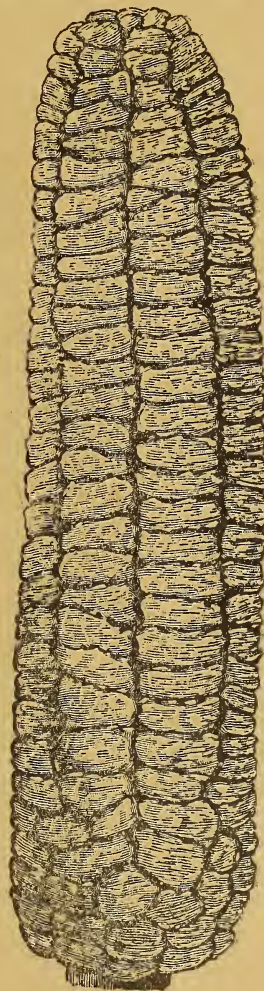
Remarkably large in ear for a second early sort and very popular in some localities. The stalks are about five and one-half feet high. The ears are about eight inches long, twelve rowed. The grain is rather broad and shallow, and the quality very good. Qt. 50c.

Perry's Hybrid

This is a very popular Eastern variety. Stalks about 6 feet high, bearing two ears about 8 inches long, 12 or 14 rowed, which often have a red or pink cob; grain medium sized, cooking very white and tender. Matures a little later than Early Minnesota. Qt. 40c; 4 Qts. \$1.50; Bu. \$10.00.

Black Mexican

This corn, when in condition for the table, cooks a bluish black. It is surpassed by none in tenderness and is a most desirable second early sort; ears about 8 inches long, usually eight-rowed. Qt. 35c; 4 Qts. \$1.25; Bu. \$7.00.



GOLDEN BANTAM CORN.

Early Evergreen We have tested many samples of Evergreen corn that were claimed to be earlier than Stowell's Evergreen and to be just as good, but we have never found any of them so valuable as the stock of this variety we offer. It has been proven both on our trial grounds and in the field to come into fit condition for use much earlier than Stowell's Evergreen and to remain in condition quite as long. Ears about seven inches long, with fourteen to twenty more or less irregular rows with very deep grain which is of the very best quality. Plants average from six and one-half to seven feet high and in ear resemble those of Stowell's Evergreen, but differ in earliness and we think are more uniform. A standard main crop variety for home garden and market; also well adapted for canning. Qt. 60c; 4 Qts. \$2.25; Bu. \$15.00.

Stowell's Evergreen This standard main crop variety excels all other late sorts in sweetness and productiveness. It is more popular than any other for canning, for marketing and for the home garden. Great care has to be exercised in the selection of stock to grow seed from, as this variety has a tendency to deterioration and a shorter grain, which makes it less sugary and desirable. We have a large and growing trade among canners and market gardeners who must have a genuine Stowell's Evergreen, and our stock is known as the safest seed for all purposes. Qt. 60c; 4 Qts. \$2.25; Bu. \$15.00.

Country Gentleman There is no sweet corn that compares with the Country Gentleman for sweetness. It is the variety par excellence where quality is desired. Market gardeners who make a specialty of growing for hotels and high class restaurant trade use this as a main crop in preference to any other. For home use it will be found superior and it is very productive. The fact that it is a favorite variety with canners proves its merit. Qt. 60c; ¼ Bu. \$2.25; Bu. \$15.00.

Early White Cob Cory An extra early variety with remarkably white grains, especially when cooked. Ears are six to seven inches long. Qt. 40c; 4 Qts. \$1.50; Bu. \$10.00.

Early Red Cob Cory One of the best extra early varieties. Ears are about six inches long and eight-rowed and well filled. This variety does especially well in the coast counties. We have customers who will not plant any other sweet corn than Red Cob Cory. Qt. 60c; 4 Qts. \$1.50; Bu. \$10.00.

CORN SALAD

Feldsalat (Gr.)

Valeriana (It.)

Large round leaved or small seeded. Oz. 10c, lb. 75c.

Curl'd CHERVIL, Gartenkerbel

Treat like parsley. A valuable flavoring herb. Oz. 20c, lb. \$2.00.

Kresse (Gr.) CRESS OR PEPPERGRASS, Kresse Agretto (It.)

Fine for salads.
Garden curled. Oz. 10c, lb. 75c.

Water Cress, Dwarf Fine curled, grows in shallow water. Oz. 25c, lb. \$2.50.

Gurken (Gr.)

CUCUMBERS

Cetriolo (It.)

CULTURE.—Flourish best in a rich, warm, sandy loam. Sow when danger of frost is over in hills four or five feet each way. As the young plant has many enemies sow thickly half an inch deep, and thin out finally to three or four plants to the hill. Use one ounce of seed to 75 hills, two to three pounds to the acre. Gather cucumbers by cutting, not tearing. Leave none to ripen if you want a full crop.



The Above Shows the True Type of Cucumbers

No. 1, Early Cluster; 2, Long Green; 3, Early Frame; 4, Early Russian; 5, White Spine

Early Russian The earliest variety and probably the hardest. Fruit 3 to 4 inches long, 1½ to 2 inches in diameter, oval, pointed at both ends and covered with fine, small spines. Vine of vigorous growth and productive. Oz. 10c, ¼ lb. 30c, lb. \$1.00.

Early Cluster

largely near the root.

An early and very productive variety. Fruit small, thick at the end, dark green, but lighter at blossom end, borne in pairs or clusters and used to some extent for pickles. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.**Early Frame, or Short Green**Fruit short, straight, small at each end, bright green, lighter at blossom end, and, although small, attractive and of excellent quality. Used both for slicing and pickling. Vine vigorous and produces fruit of suitable size for slicing. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.**Improved White Spine, or Arlington****Peerless White Spine****Long Green**Fruit from 10 to 12 inches long, dark green, very firm and crisp. It is used largely for slicing, but on account of its firmness and crispness is popular with some for pickling and is especially desirable, when mature, for sweet pickles. Vine of strong, vigorous growth, and productive. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.**Cumberland**A distinct variety of the hardy White Spine type. Fruit large, symmetrical, dark green and thickly set with fine spines. Though especially recommended for pickling, it is valuable for slicing, being of excellent quality. Vine vigorous, prolific, bears a long time. Oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.**Japanese Climbing** $\frac{1}{4}$ lb. 30c, lb. \$1.00.**Boston Pickling****Chicago Pickling**A favorite for pickling. Medium size; smooth; light green; productive. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.**Rollison's Telegraph****Small Gherkin**This variety is preferred above all others by some of the largest pickling establishments in Chicago and elsewhere. It is one of the best for the purpose, combining almost every good quality, and being alike satisfactory to grower and pickle maker. I have a choice strain of this seed. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.**EGG-PLANT**

Eierpflanze (Gr.)

Petronciano (It.)

CULTURE.—Plant the seed in March in a hotbed, or, for family use, in flower pots in a warm window. Transplant in open ground after weather has become warm and settled, in rows two feet apart each way. They require rich soil and as favorable a location for warmth as the garden will afford. One ounce to one thousand plants.

Black Beauty**New York Improved Purple**Considered the earliest of the large fruited varieties. Color, a rich purple. Oz. 35c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.75.Surpassing all in size of fruit. Standard market sort. Oz. 35c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.75.**ENDIVE**

Endivien (Gr.)

Endivia (It.)

CULTURE.—For early use sow as soon as the ground can be worked in the spring, in drills 15 inches apart, and thin plants to 6 to 8 inches in a row. Any common garden soil will do. To blanch the leaves, gather them carefully together when perfectly dry, and tie with matting or any soft fibrous material. The leaves are very highly esteemed for use as salads. One ounce will sow 150 feet of drill.

Fine Moss CurledVery ornamental. A little more curled than the London. Oz. 20c; $\frac{1}{4}$ lb. 40c; lb. \$1.50.**London Green Curled**A standard sort. Oz. 20c, $\frac{1}{4}$ lb. 40c; lb. \$1.50.**Broad Leaved Batavian**A large summer variety. Oz. 20c; $\frac{1}{4}$ lb. 40c; lb. \$1.50.

Endive

Knoblauch (Gr.)
Sets, Oz. 10c, lb. 40c.**GARLIC**

Aglio (It.)

HERBS

See page 34.

KALE,

Cavolo rapa (It.)

Blatterkohl (Gr.)

For early use, sow in May and transplant in June, and treat generally as for cabbage.

Dwarf Curled ScotchA standard variety. Oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.**KOHL-RABI**

Cavolo rapa (It.)

Knollkohl (Gr.)

White, above ground. Oz. 25c, lb. \$2.00.
Purple, above ground. Oz. 25c, lb. \$2.00.**LEEK**

Porree (Ger.)

Porro (It.)

American Broad FlagThe standard variety. Oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

Kohl-Rabi

Kopfsalat (Gr.)

CULTURE.—Lettuce thrives on nearly all soils, but because the growth should at all times be rapid to insure crispness and best flavor, the soil should be heavily enriched and well worked before planting. Lettuce being quite hardy, seed may generally be sown as soon as ground can be fitted, as, while prolonged or continued freezing will kill the plants, they are but little injured by an ordinary frost. Seed may also be sown in the hotbed in gentle heat, and the plants, if well hardened by having been often exposed to the air, may usually be set in the open ground very soon after the time suggested for sowing seed outdoors.



Big Boston Lettuce being fit for cutting. The plant is upright, leaves, savoyed, finely crumpled at the edges. Pkt. 5c, Oz. 15c, lb. \$1.25.

Onondaga

This remarkable variety was introduced by us many years ago. A splendid greenhouse sort, slightly fringed, forming a semi-head, a wonderful shipping and keeping variety, green under glass and of slightly reddish cast when grown in the open. Tender, crisp. Pkt. 5c, Oz. 15c, lb. \$1.25.



Grand Rapids Lettuce

Denver Market

Cabbage, butter head, medium small size, medium green. One of the old standard varieties, and in our experience have found it identical with White Seed Tennisball. Pkt. 5c, Oz. 15c, lb. \$1.25.

New York Head

Curled or crisp as Iceberg, dark green heads somewhat conical. Pkt. 5c, Oz. 15c, lb. \$1.25.

Old Lettuce Seed for Birds

Oz. 5c, lb. 50c.

LETTUCE

Lohuga (It.)

Big Boston

The best large heading and suitable for forcing. It produces fine large yellow heads. Leaves are white, crisp, tender and sweet. Pkt. 5c, Oz. 15c, lb. \$1.25.

Black Seeded Simpson

The most popular loose leaf variety. Crisp and tender. It grows a fine green leaf. The inner leaves form a loose head. Pkt. 5c, Oz. 15c, lb. \$1.25.

Simpson Early Curled

(White Seeded)—A very extensively used early loose leaved or clustering variety. Leaves light green, slightly frilled and much blistered. Crisp, sweet and tender. Especially adapted for thick sowing. Very fine for poultry feeding. Pkt. 5c, Oz. 15c, lb. \$1.25.

Grand Rapids

(Black Seed) — As a greenhouse forcing lettuce this stands at the head of the list. Quick growing, very hardy—not liable to rot. Will remain in good condition several days after forms a loose cluster of large thin bright green leaves.

Hanson Head

(Seed white.) A very desirable late summer lettuce. The plant is compact and forms a cabbage-like head which remains in condition longer than summer-head sorts. Outer leaves bright, yellowish green and broad. Somewhat crumpled and frilled edge and with a distinctive mid-rib. Inner leaves white, crisp and sweet. Pkt. 5c, Oz. 15c, lb. \$1.25.

Paris White Cos

The Cos Lettuce differs in shape from other sorts. Head being elongated and of conical form, about nine inches in height and about six inches in diameter. Outer coloring yellow green. To secure best results it should be tied up. Pkt. 5c, Oz. 15c, lb. \$1.50.

Yellow Seeded Butter

Cabbage Butter head, medium large, medium green, leaves crumpled and rather thick. Is similar or same as silver ball. Pkt. 5c, Oz. 15c, lb. \$1.25.

Deacon Head

Cabbage Butter head, medium size, medium green, leaves thick. Does not form a decided head but a well folded one, which is very oily and golden yellow inside. Pkt. 5c, Oz. 15c, lb. \$1.25.

Melone (Gr.)

The Muskmelon succeeds best in warm, rich soil. While both plant-food and humus are necessary to all plants, all vines require an extra amount. Manure contains both, while rotted turf and commercial fertilizer combined supply both. If manure is used it should be well rotted, finely pulverized and evenly distributed throughout the soil. If plant-food is to be supplied by the use of commercial fertilizers, then land should be selected which, a short time before, was in grass, the turf well pulverized and the fertilizer, like the manure, evenly distributed. The muskmelon should not be planted until all danger of frost is past. Plant from 4 to 5 feet apart each way, allowing ten or more seeds to each hill, and cover with an inch of soil. If young plants are attacked by the striped beetle, dust with either air-slaked lime, soot or ashes, well diluted with fine road dust, taking care, however, that none of these is used too freely. Thin to three or four plants to the hill.

Paul Rose, or Petoskey

This excellent melon is the result of a cross of the Osage and Netted Gem, and combines the sweetness of the former with the appearance of the Gem. Fruit oval, finely netted, about 5 inches in diameter. Flesh rich orange and even sweeter than the Osage. Oz. 10c, ¼ lb. 40c, lb. \$1.00.

MUSKMELON

Popone (It.)

Emerald Gem Fruit of medium size, skin very dark green, generally smooth; flesh thicker than of most varieties, in color rich salmon, and not surpassed in richness and flavor. More certain to produce uniformly good melons than is perhaps any other variety. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

Rocky Ford (Netted Gem) More largely grown than any other of the small or basket melons and shipped in enormous quantities from Colorado and Arizona. Fruit oval, slightly ribbed, densely covered with fine netting; flesh green, thick, very sweet and of rich flavor. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

Improved Green Nutmeg Large, round, slightly flattened at both ends, ribbed and covered with coarse netting; flesh thick, of fine flavor. Vine vigorous and productive. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

Surprise Fruit oval, slightly ribbed, netted in places, skin yellowish white; flesh deep salmon, of good quality. Vine hardy, productive and bears early. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

Extra-Early Hackensack Fruit of good size, nearly round. Flesh green, a little coarse, but very juicy and sweet, and of good flavor. Vine very productive. Oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

Vick's Irondequoit The flesh is a beautiful dark orange, and the closely netted skin is pale yellow when ripe, giving it a most attractive appearance when exposed for sale or when cut for the table. The fruit is unusually large, in fact it is one of the largest varieties grown. The melons are distinctly ribbed and beautifully netted. The flesh is solid and very thick, having but a small seed cavity. The flavor of a well ripened "Irondequoit" is delicious, sweet, rich, spicy and melting—the very highest quality in muskmelons. $\frac{1}{2}$ oz. 25c, oz. 40c, $\frac{1}{4}$ lb. \$1.50, lb. \$5.00, that of other varieties. Oz. 10c, lb. 50c.

Honey Dew Melon "Sweetest Melon Ever Grown." During the fall of 1915 the first Honey Dew Melons were placed on the market. The product from slightly over two acres netted \$3600.00 on the Chicago market. These melons have sold at wholesale from 35 cents to \$1.50 on Eastern Markets. The rind is a dull white when ripe. Part of the melon shows a slight check in the rind like a tendency to net. This appears when the melon is ready to pick. The size runs from six to seven inches in diameter from top to bottom, and eight inches in length. The matured melons are practically all of the same shape and size. Flesh is a light green and is almost honey sweet. This melon is the best of all shippers and will keep several weeks, so there is practically no loss from spoiled melons in shipping. This is one of the best market melons grown. Vines vigorous, and produces six to ten fine melons to the hill. Oz. 50c, $\frac{1}{4}$ lb. \$1.75, $\frac{1}{2}$ lb. \$3.50.



Rocky Ford Muskmelon

Melone (Gr.)

WATERMELON,

Popone (It.)

Sweet Heart Introduced in 1894 and is very popular as a shipping melon particularly in the South. Vine vigorous and very productive, ripening its fruit evenly. Fruit of largest size, oval, very heavy, rind thin but firm; color very light green, very slightly veined with a little darker shade. Flesh bright red, firm but very tender and sweet. Fruit remains in good condition a long time after ripening. Seed black. Our stock will be found very uniform in shape, size and color. Oz. 10c, lb. 75c.

Cuban Queen This magnificent variety was originally brought from the West Indies and seed first offered in 1881. The melons are of large size, oblong in form, slightly tapering at the stem end. Skin beautifully striped in dark and light green. Rind quite thin, but tough enough for shipping. Flesh bright red, remarkably firm, and of luscious quality. Oz. 10c, lb. 75c.

Dark Icing, or Ice Rind Fruits of round or shortened oval form, with dark-green skin. Flesh deep pink, very sweet and melting. Justly popular with New Jersey truckers, as its noted fine quality makes the melons sell well on the markets. Oz. 10c, lb. 75c.

Peerless Sometimes sold as Ice Cream. One of the best early sorts for the home garden and for market gardeners who deliver direct to consumers. Vine moderately vigorous, hardy, productive. Fruit medium sized, oval, but somewhat uneven in shape, bright green, finely veined with a darker shade. Rind thin, flesh bright scarlet, solid, crisp and very sweet. Seed white. Oz. 10c, lb. 75c.

Cole's Early A very early melon; just right in size and shape. Oz. 10c, lb. 75c.

MUSHROOM

The Mushroom is an edible fungus of which there are numerous varieties. We handle the ordinary commercial variety of a creamy white color with loose gills which underneath are of pinkish-red, changing to liver color. The mushroom produces "seed" or spores and there is developed a white, fibrous substance in broken threads, called spawn, which is developed and preserved in horse manure, pressed in the form of bricks. Mushrooms can be grown in cellars, in sheds, in hotbeds or sometimes in the open air, the great essential being a uniform degree of temperature and moisture. Our space is too limited here to give the necessary cultural directions, but these are published in book or pamphlet form.

Pure Culture Mushroom Spawn By a newly discovered process of selection and grafting, the spawn is scientifically propagated so that large, vigorous and finely flavored mushrooms are reproduced. The sort we offer is earlier, more productive and a marked improvement on wild spawn, either French or English. Brick (about $1\frac{1}{4}$ lbs.) 35c; 5 bricks \$1.50.

MUSTARD

White English Leaves comparatively small and smooth, deeply cut or divided and of medium dark green color. Plant upright, of rapid growth and soon when young, are mild and tender. Seed light yellow and larger than that of other varieties. Oz. 10c; lb. 40c.

Southern Giant Curled Leaves large, light green with tinge of yellow, much crimped and frilled at edges. Plant upright or slightly spreading in growth. Highly esteemed in the South for its vigorous growth, hardness and good quality. Seed small, reddish brown to nearly black. Oz. 10c, lb. 75c.

NASTURTIUM

Tall Mixed Garden

Sometimes called Indian Cress. Grown not only for ornament but the beautiful orange colored flowers and foliage are used for garnishing and the young leaves or shoots are excellent for salads. The green seed pods are greatly esteemed by many for use in mixed pickles. Early in spring sow, preferably in rather light soil, in rows 3 feet apart and 2 inches apart in the row, covering one inch deep. When the young plants are about four inches high thin to six inches apart in the row. The vines can be supported if so desired by stakes, strings or brush. Oz. 10c, lb. 75c.. For other varieties of Nasturtium see flower seed pages.

OKRA, OR GUMBO

The young seed pods are used in soups, stews, catsups, etc. Highly esteemed in the South. After danger of frost is past, the ground being warm and in good condition, plant in rows about two and one-half feet apart, covering with about an inch of fine soil firmly pressed down. When about three inches high, thin to about one foot apart in the row. Cultivate and keep free from weeds. The pods are in best condition for use when from one to three inches long.

White Velvet

Plant is about three and one-half feet high, early maturing and very productive. Pods white, long, smooth and are tender until nearly full sized. Oz. 10c, lb. 60c.

Zwiebel (Gr.)

ONIONS

Cipolio (It.)

How to Raise Onions for the Market

THE SOIL.—We prefer a soft, dark sandy loam, not too fine. This is much better if it has been cultivated with hoed crops, kept clean from weeds and well manured for two years previous, because if a sufficient quantity of manure to raise an ordinary soil to a proper degree of fertility is applied at once, it is likely to make the onions soft. The same result will follow if we sow on rank mucky ground or on that which is too wet, and it is impossible to raise either a large or profitable crop on stiff clay, very light sand or gravel.

PREPARATION.—Onions respond well to very liberal manuring. As much as forty loads of stock manure well composted or one ton of high grade commercial fertilizer per acre needed will vary with the soil, the seed used and the kind of onions desired. Thin seeding gives much larger onions than thick seeding. Four or five pounds per acre is the usual quantity needed to grow large onions. We prefer a drill that sows a very close row.

CULTIVATION.—As soon as the young plants can be seen in the rows give a shallow working either with rake or some other tool that pulverizes well the whole top soil. Work the crop again in a few days with a hoe or tool that cuts the ground over, this time as closely as is possible to the row without injury to the young plants; follow as quickly as possible with a thorough hand weeding.

Prizetaker

Grows to an immense size and for fall marketing is unexcelled. Although of such great size, it is very hardy and a fair winter keeper, as it ripens up hard and firm; very fine grained, and of mild, delicate flavor. The outside skin is rich yellow while the flesh is white. To get the best results from this onion the seed is sown in beds and transplanted. It will, however, make a good crop if sown in the ordinary way. Oz. 20c, lb. \$2.00.

Southport White Globe

This grows to a very large size and is a perfectly globe-shaped onion. Color is a clear pure white. This variety is used by the market gardeners for bunching. Oz. 35c, lb. \$3.50.

Early Flat Yellow Danvers

A good variety, but not as round or quite as early as the Yellow Globe Danvers. Very productive. Oz. 20c, lb. \$1.50.

Southport Yellow Globe

A large perfectly shaped Globe onion and an excellent onion for keeping throughout the winter. A very heavy cropper, handsome in appearance and good dark yellow color. Oz. 25c, lb. \$2.50.

Yellow Globe Danvers

This fine onion is of large size. An early and abundant cropper. Bulbs very thick, flat or slightly convex bottoms, full oval top with small neck and rich brownish yellow skin. Oz. 20c, lb. \$1.75.

Michigan Yellow Globe

The bulbs are large and uniformly spherical with very small necks and the largest diameter below the center of the bulbs, of a rich orange color. Oz. 20c, lb. \$1.75.

Ohio Yellow Globe

An early Globe onion, small neck and very uniform in size and color. Very popular in the marsh onion sections of Ohio and Indiana. We have an excellent stock of this standard variety. Oz. 20c, lb. \$1.75.

Southport Red Globe

tender. Oz. 20c, lb. \$1.75.



Yellow Globe Danvers Onion

This is a fine keeper. Large size and considered one of the best red onions. Flesh is fine grained, very mild and

White Portugal American Silver Skin. This is the best sort to sow—for onion sets or for pickling. When sown thickly for either it makes a small, round, hard bulb. Oz. 25c, lb. \$3.00.

Philadelphia Silver Skin Very desirable for family use. Flavor mild and pleasant. Skin silvery white. Sets grown from this sort are good keepers. Oz. 30c, lb. \$3.25.

Large Red Wethersfield We have a very fine and select strain of this sort. Color is deep purplish red, flesh white, moderately grained and very firm. Yields an enormous amount per acre, and is one of the best winter keeping onions. Oz. 20c, lb. \$2.00.

Extra Early Flat Red This variety matures from ten days to two weeks earlier than the Red Wethersfield. The color is a deep rich red, fine grain and close. Oz. 20c, lb. \$1.75.

Petersille (Gr.)

PARSLEY

Prezzemolo (It.)



Double Curled Parsley

CULTURE.—Sow seeds in shallow drills in the early Spring for border, or in rows 12 to 18 inches apart, care being taken that the drills be not more than one-half inch in depth, and that the seed be well pressed down after sowing, as the seed germinates very slowly, three to five weeks elapsing sometimes before it makes its appearance. Use one ounce to 150 feet of drill, three pounds to an acre. Cultivate frequently.

Plain Parsley The leaves of this variety are flat, deeply cut but not curled. Very desirable for flavoring soups and stews and for drying. It is a favorite on account of its very dark green leaves, as well as its hardness. The curled sorts are very extensively used for garnishing. Pkt. 5c, Oz. 15c, lb. \$1.00.

Champion Moss Curled This is a vigorous, compact growing variety, excellent for garnishing and flavoring. A handsome decorative plant. Leaves very finely cut and so closely crisped or curled as to resemble bunches of moss. Fine deep green color and very attractive foliage. Pkt. 5c, Oz. 15c, lb. \$1.00.

Pastinake (Gr.)

PARSNIPS

Pastinaca (It.)

CULTURE.—Sow in early spring, in rows two to three feet apart, thin to four or six inches in the row. One ounce of seed will sow 200 feet of drill, four to five pounds per acre in drills two and one-half feet apart. Cover the seed one-half inch. Use rotted manure and fertilizer. Parsnips may be left in the ground all winter.



"Kelway's Don" Parsnip

Marrow Parsnip This is a fine new Parsnip of English origin which we confidently offer to our trade. It is very fine grained and exceedingly sweet, while the peculiar parsnip flavor is fully reserved. The roots are unusually smooth and attractive in appearance. The best of all parsnips for private or market garden use. Oz. 15c, lb. 75c.

Kelway's Don A half long variety of our introduction, selected for handsome form, size, whiteness of skin and flesh, and firmness and solidity of texture. Recommended for exhibition (see illustration). Oz. 15c, lb. \$1.00.

Gurnsey (Improved Half-Long)

Greatly improved strain. The roots do not grow as long as the Hollow Crown, but are of greater diameter and very easily gathered. A very heavy cropper. Roots very smooth. Flesh fine grained and of excellent quality. Oz. 10c, lb. 75c.

Improved Hollow Crown This really is the greatest old-time favorite among the parsnips and has a host of friends which it will never lose. It is very smooth, white with a very thick shoulder and tapering down to a graceful point. One of the best known, none better. Oz. 10c, lb. 75c.

Erbsen (Gr.)

PEAS

Piselli (It.)

For early peas the soil should be light and warm, but for general crop a moderately heavy soil is better. Fresh manure and very rich or wet mucky soil should be avoided, as they cause a rank growth of vine at the cost of the quality of the peas, such soil is often the cause of early sorts maturing unevenly. Sow as early as possible a few of some early variety on warm, quick soil, prepared the fall before, planting in double rows six to eight inches apart and two and one-half to four feet between the double rows. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in maturity. The peas will give quicker returns if covered only one inch deep and where earliness is most important they may be treated in that way. Larger pods and more of them will be produced if the seed be planted in trenches three to six inches deep and covered with only one or two inches of soil; when the plants are five or six inches high fill the trench level with the surface; this will secure deep rooting, prevent mildew and prolong the bearing season. If the peas be covered to the full depth at first, or if water be allowed to stand in the trenches, they will not germinate or grow well. All varieties growing more than one and one-half feet do better if staked up or brushed when four to six inches high. The support is usually given by sharpened branches of trees set between the double rows.

Earliest of All, or Alaska By careful selection and growing we have developed a stock of this smooth blue pea of unequalled evenness in growth of vine and early maturity of pods which are filled with medium sized, bright green peas of good flavor. Vines of medium height, about two and one-half to three feet and of distinctive light color. Pods of good size, about two and one-half to two and three-fourths inches long. Seed small, smooth, and bluish green in color. Matures all the crop at once and is an invaluable variety for market gardeners and canners. Qt. 35c, Bu. \$10.00.

Thomas Laxton A very early wrinkled variety of great merit. Vine vigorous, of medium height, about three feet, similar to that of Gradus, but darker in color, hardier and more productive. Pods large, often four inches long, with square ends, similar to but larger, longer and darker than those of Champion of England and as uniformly well filled. The green peas are very large, of fine deep color and unsurpassed in quality. We are certain that the earliness and productiveness of this pea need only to be known to make it one of the most popular sorts for the market and home garden, as in appearance and quality it is one of the very best varieties yet produced. Qt. 35c, Bu. \$8.00.

Gradus A very early, wrinkled pea. Vine similar in appearance to Telephone, but of medium height, only about three to three and one-half feet. The pods are very large, about four and one-fourth inches long, very nearly as large as those of Telephone, uniformly well shaped, pointed, handsome and more attractive than those of the first earlies. Peas very large, of splendid quality and beautiful light green color which they retain after cooking. Practically the same as Prosperity. Qt. 35c, Bu. \$8.00.

American Wonder Vigorous, productive vines, with a luxuriant foliage, and producing the leaves on one side of the stock, growing from 9 to 12 inches high. On account of its dwarf habit of growth it is very desirable for private garden use. Pods are light colored, straight, round, about two and one-half inches long and blunt at the end. Fit for picking fifty-five days from planting. Seed is wrinkled, green, medium in size and square at the ends. Qt. 30c, Bu. \$6.50.

Nott's Excelsior Resembling Gems in habit, but more dwarf and uniform in growth, height 12 to 17 inches, with rather light foliage. Pods are light in color, round, about two and one-half inches long, blunt at the ends. Fit for picking fifty-six days from planting. Seed green, wrinkled, medium in size and square at the ends. Qt. 30c, Bu. \$7.00.

Little Marvel We are sure that as soon as American gardeners, whether for pleasure or profit, become acquainted with Little Marvel they will drop both Little Gem and Nott's Excelsior, popular as these two varieties are today. The vines, of dwarf even growth, average fifteen inches in height and are heavily set with fine pods, frequently borne in pairs. The pods average two and one-half inches in length, are square at the bottom and well filled with six to seven quite large, deep green peas. The peas are ready for the table fully as early as American Wonder or Nott's Excelsior, while the pods are larger and the vines produce a much heavier crop. All who desire a fine early crop of the choicest quality of wrinkled peas will be delighted with Little Marvel. Qt. 35c, Bu. \$8.00.

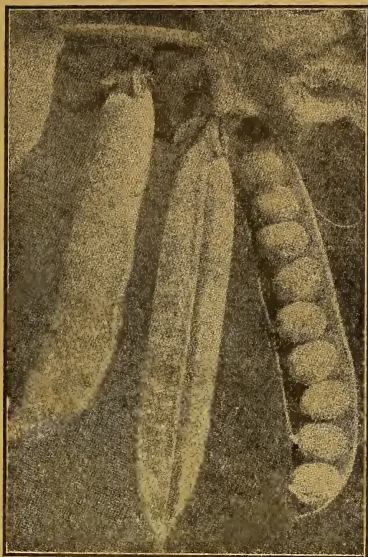
Premium Gem Desirable early green wrinkled dwarf variety similar to but better than McLean's Little Gem. The vine is very productive and grows to a height of from fifteen to eighteen inches. The pods are of medium size and crowded with six to eight very large peas of fine quality. The seed is green, large, wrinkled, often flattened. Qt. 30c, 4 Qts. \$1.00, Bu. \$6.00.

Laxtonian This handsome new wrinkled pea is the largest podded of the dwarf varieties on our list. The beautiful dark green pods are similar to Gradus in shape and splendid quality, are very nearly as large in size and mature a little earlier. The vines are vigorous and productive, averaging 15 to 18 inches high; foliage dark green; pods about four inches in length. Seed light green, large, wrinkled, flattened, irregular in shape. Qt. 40c, Bu. \$8.00.

Potlatch Strong, vigorous vines of even growth, 20 to 24 inches in height, with luxuriant dark foliage, bearing pods medium green in color three and one-half to four inches in length. Broad and pointed at the ends. No variety known will produce more pods, and no pods could possibly shell out better. The Potlatch is a variety from which anyone may expect great things. Fit for table use 61 days from planting. Seed green, wrinkled, large in size. We consider ourselves very fortunate in having secured and introduced this pea. Qt. 35c, Bu. \$8.00.

McLean's Advancer A green, wrinkled variety of medium height, about two and three-fourths to three inches long, which are abundantly produced and well filled to the ends. This pea is used very extensively by market gardeners because of its productiveness, the fine appearance of its pods, and is popular with consumers on account of its quality. It is also largely used by canners. By careful selection we have developed a strain showing marked improvements in vigor of plant, size of pod and productiveness. Qt. 30c, Bu. \$6.00.

Prices subject to change without notice.



Telephone Peas

Telegraph, or Long Island Mammoth

the Telephone; peas very large and of dark green color; seed almost smooth. Vines tall, about four to four and one-half feet. Pods very large, about four and one-half inches long. A splendid sort for the market garden; will give good returns even under conditions that would cause most varieties to fail. Qt. 30c, Bu. \$6.00.

Later Varieties

Improved Stratagem

Most stocks of the large podded, semi-dwarf, English varieties of peas have been so wanting in uniformity and evenness of type as to disgust American planters, but by constant effort we have developed a stock which comes true and we do not hesitate to pronounce it one of the best of the large podded sorts. The pods are of largest size, long and pointed, dark green, and uniformly filled with very large, dark green peas of the finest quality. Qt. 30c, Bu. \$6.50.

Horsford's Market Garden

The vine is of medium height, hardy and very productive, giving the greatest number of pods of any on our list. Foliage dark green, leaves small. Pods contain five to seven medium sized, sweet, dark green peas which retain well their color and sweetness after canning. Qt. 30c, Bu. \$6.00.

Champion of England

A very productive variety, universally admitted to be one of the richest and best flavored of the late peas. The vines are four to five feet high. The seed is light green and much shriveled. Very inferior and mixed stocks of this sort are frequently offered, but when the seed is as well grown and selected as that we offer we consider the variety equal in quality to any in cultivation and one of the best of its season, either for the home garden or market gardener. Qt. 30c, Bu. \$7.00.

Melting Sugar

(Edible pods) There is a class of peas not generally known in this country but much used abroad in which the sweet, brittle and succulent pods have none of the tough, inner lining found in the ordinary varieties of garden peas. They are used in the same way as snap or string beans. Qt. 30c, Bu. \$6.00.

Large White Marrowfat

The vines of this variety are about five feet high and of strong growth. The pods are large, cylindrical, rough, light colored, and well filled; seed large, smooth, round and light yellow. The variety is excellent for summer use but is inferior in quality to most of the newer sorts, although undoubtedly one of the most productive of the garden varieties. Qt. 25c, Bu. \$5.50.

Large Blackeye Marrowfat

An excellent variety, growing about five feet high. It is a very prolific bearer of large pods. Seed large, smooth, round, light yellow with black eye. One of the very best of the Marrowfat sorts. Qt. 25c, Bu. \$5.50.

Duke of Albany

A most valuable variety of the Telephone type; remarkably hardy in growth, producing dark green pods of large size, well filled with extra large sweet peas. The vines grow three feet in height and are very productive. Qt. 35c, Bu. \$7.00.

Telephone

This has become the leading pea with market gardeners whose trade appreciates fine appearance and high quality. Vines tall and vigorous, growing about four feet high, with large, coarse, light colored leaves and producing an abundance of pointed pods of largest size, often four and one-half to five inches long, attractive bright green, filled with very large peas which are tender, sweet and of excellent flavor. It comes into use soon after the Premium Gem and is one of the best sorts for either home or market. Qt. 35c, Bu. \$7.00.

Alderman

This comparatively new pea is in many respects the very best early main crop variety of the valuable Telephone type. The vines are tall growing, about four and one-half to five feet high, dark green, vigorous and exceedingly productive. Pods of largest size, often five to five and one-half inches long, dark green, similar to but a little larger and a shade darker in color than Duke of Albany and about the same in season. The peas are of largest size and unsurpassed in quality. Market gardeners are demanding the large podded, dark colored sorts which retain their fine appearance even after shipping a long distance. The Alderman answers these requirements and furthermore is the most productive variety of this class. We recommend it unreservedly. Qt. 35c; Bu. \$7.00.

Stronger growing and hardier vine

with darker foliage and pods than the Telephone; seed almost smooth. Vines tall, about four to four and one-half feet.

Pfeffer (Gr.)

PEPPER

Peperone (It.)

Peppers are most largely used for seasoning meat and vegetable dishes; also for making chow chow and chili sauce. The culture is the same as for egg plant and the plants need quite as much heat to perfect them. Sow seed early in hotbed, or about middle of spring in open seed bed, the soil being light and warm. When three inches high, transplant in rows about two and one-half feet apart and two feet apart in the row. Cultivate and keep free from weeds. Guano, hen dung or any other bird manure hoed into the surface soil when the plants are about six inches high will undoubtedly increase the product.

Red Cherry

A second early sort. Plant tall, bearing a profusion of round, bright red fruits which are very pungent when ripe. A very ornamental plant when in fruit. O., 25c, 1/4 lb. 75c, lb. \$2.50.

Prices subject to change without notice.

Giant Crimson

The earliest maturing of the extremely large, red sweet peppers and surpassed by none in evenness of size and shape. The plant is vigorous and upright, growing two and one-half to three feet high, larger than that of Chinese Giant and more productive. The fruits are of the largest size, ripen earlier than any of the other very large sorts and average heavier, as the flesh is exceptionally thick. Color deep green when fruit is young, deep crimson when matured; flavor very mild. Oz. 40c; ¼ lb. \$2.00, lb. \$5.00.

Red Chili

A late variety. Pods bright, rich red, about two inches long, one-third to one-half inch in diameter at the base, tapering to a sharp point and exceedingly pungent when ripe. Oz. 25c, ¼ lb. 75c, lb. \$2.50.

Long Red Cayenne

A well known medium early variety having a slender, twisted and pointed pod about four inches long. Color deep green when fruit is young, bright red when ripe. Extremely strong and pungent flesh. Oz. 25c, ¼ lb. 75c, lb. \$2.50.

Large Bell, or Bull Nose

Our stock of this well known variety, sometimes called Sweet Mountain, is very superior. Plant vigorous, about two feet high, compact and very productive, ripening its crop uniformly and early. The fruits are large, with thick, mild flesh of excellent quality for use in salads and mangoes or stuffed peppers. The color is deep green when fruit is young, bright crimson when ripe. Oz. 30c, ¼ lb. \$1.00, lb. \$3.00.

Ruby King

An improved American variety, very large and attractive. The plant is about two and one-half feet high, vigorous, compact and productive. The fruits are often four to four and one-half inches long and of deep green color when young, bright red when ripe. The flesh is thick and mild flavored. One of the best varieties for mangoes or stuffed peppers. Oz. 30c, ¼ lb. \$1.00, lb. \$2.75.

Large Sweet Spanish

A late maturing and attractive, red, sweet pepper. Plant about two and one-half feet high, upright, very compact, vigorous and productive. Fruits very large and long, frequently seven inches in length and about two inches in diameter, with very thick, mild flesh of excellent quality. Color deep green when fruit is young, rich red when ripe. Oz. 25c, ¼ lb. \$1.00, lb. \$3.75.



Bell or Bull Nose

POTATOES

Kartoffel (Gr.)

Patate (It.)

Irish Cobbler

Is the best early white potato grown. The tubers are smooth, round, plump and handsome. The flesh is white and of splendid quality.

True Early Rose

The Early Rose is the old standard early potato; rosy bluish skin, white flesh; early, productive, and of excellent flavor; a fine keeper. Bu. \$4.00.

Late Russet

The famous "Russet" recently introduced from Michigan yielded 393 bushels to the acre on a Tully farm in 1914, many specimens weighing 15 to 20 ounces. Most vigorous grower and an immense yielder. It is bug proof and blight proof. Has a russet skin; flesh white as snow. A fine cooker. The most valuable late sort on the market. Bu. \$3.50. For further particulars see page 15.

Carman No. 3

Another large, round, white, main crop potato; tubers are very large, eyes are shallow and few in number, and it is an immense yielder of large potatoes. Bu. \$3.50.

Melonen-Kuerbiss (Gr.)

PUMPKIN SEEDS

Zucca (It.)

Connecticut Field per lb. \$.40
Cheese Pumpkin, fine for table, per lb.50

Cashaw Pumpkin, fine table, per lb. \$.60
Mammoth Prize Pie, per lb. 1.00

Radies (Gr.)

RADISH

Ravanello (It.)

Being a root crop, good brittle radishes require light, well-worked soil, made very rich and mellow to insure quick growth. If permitted to grow slowly, they become tough and pithy. They are easy to grow and frequent plantings will insure a constant supply for the table. Summer varieties can be sown all spring and well into summer. Winter varieties, however, require some time to mature, and the seed should be planted in August and September for good radishes in November and December.



Deep Scarlet Turnip
Radish Small Top-New

Johnson's Perfection Red

White tipped, turnip shaped. This radish is a remarkably attractive variety. The white tip extends nearly half way up the root, and the brilliant color of the top shows up in strong contrast. Excellent for market work. Oz. 10c, lb. 75c.

Early Scarlet Turnip

A good, scarlet, turnip-shaped radish. It is of very quick growth, and of a very desirable size, with small tops. Suitable for growing outdoors or for forcing. Oz. 10c, lb. 75c.

Vick's Scarlet Globe

This grand radish has established a reputation as a forcing sort. Its peculiarity is that it will bear the heat requisite for forcing without becoming pithy in character or suffering injury to its flavor. Its attractive shape is shown in the illustration. Its color is a rich scarlet. It has a small top and is a high bred radish. Oz. 10c, lb. 75c.

Crimson Giant Forcing

A new variety which will be a popular market and home garden variety, since it matures very early and remains firm and crisp much longer than other short varieties. Color, rose carmine with white tip. It is top-shaped. Oz. 10c, lb. 75c.



French Breakfast



Chinese Rose Winter

Chinese White Winter, or Celestial (or Cal. Mammoth White Winter.) The well-known and popular winter variety. Clear white, about four inches long and half stump-rooted. Keeps firm and crisp until it runs to seed. Is a good cooking variety, and when cooked the flavor resembles turnip. Oz. 10c, lb. 75c.

Chinese Rose Winter A bright scarlet winter variety. About four inches long and stump-rooted. Matures two or three weeks earlier than the Chinese White Winter and like it is firm and crisp and does not grow pithy until it runs to seed. Oz. 10c, lb. 75c.

Brightest Long Scarlet A very showy, long variety. Is thick at the shoulder and tapering. Bright rose scarlet with distinct white tip. Oz. 10c, lb. 70c.

French Breakfast A popular variety for market or forcing. It is about two inches long and decidedly stump-rooted. Color, bright rose with bottom of root and the tail pure white. Oz. 10c, lb. 75c.

White Strasburg A white radish, of large size, good quality, and ability to resist severe heat. I always recommend White Strasburg for summer planting. It will grow solid, with good flavor, when others fail. Popular with market gardeners. Oz. 10c, lb. 75c.

Giant Stuttgart This mammoth white radish is the largest of the turnip shaped sorts. It has solid, crisp, pungent flesh, and is highly prized by people demanding a radish of high flavor. Both skin and flesh are pure white. It should be given plenty of space in the row. Oz. 10c, lb. 75c.

Icicle A handsome white variety, about 5 inches long, with sloping top and pointed root. Quick growing, brittle, and mild in flavor. Oz. 10c, lb. 75c.

Early Round Dark Red, or Prussian Globe A bright scarlet turnip-shaped variety. Early, quick growing, and a handsome radish. Oz. 10c, lb. 75c.

Round Black Spanish A winter variety, with black skin and white flesh. It is top-shaped or almost globular. Oz. 10c, lb. 75c.

Black Spanish, Half Long A shorter, olive-shaped variety with half stump-root and sloping top. Oz. 10c, lb. 75c.

RHUBARB

Rhubarb (Gr.) Rabarbara (It.)
CULTURE.—Plant roots four feet apart each way, in very rich, well manured soil. Cultivate well and top-dress liberally. Plants easily grown from seed. Sow in drills about 18 inches apart, and thin the plants to 12 inches in the drills. Use one ounce to 75 feet of drill.
Victoria A good market sort, with beautiful red stalks. Pkt. 5c, Oz. 15c, ¼ lb. 40c, lb. \$1.50. Roots, 15c each, 4 for 50c, postpaid. By express or freight, not prepaid, \$1.25 per dozen.

SAGE

A hardy, perennial shrub, with whitish-green, oval, and very much wrinkled leaves, which have a pleasant smell and which are used for seasoning. It is easily grown and the seed can be sown almost any time. Its fragrant, purplish flowers are especially attractive to bees, and the finest white honey has its source in sage blossoms. Oz. 25c, lb. \$1.75.

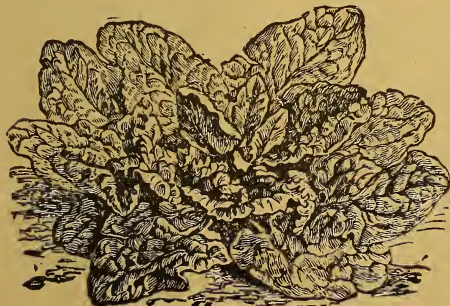
Haferwurz (Gr.) Sassefrica (It.)
CULTURE.—Sow early and deeper than parsnip, otherwise culture is the same and, like that, roots, if desired, may be left in the ground through the winter, but should be dug very early in the spring, as they deteriorate rapidly after growth commences.

Mammoth Sandwich Island Larger, of stronger growth, and less liable to grow prongy than the old Long White. Pkt. 5c, oz. 15c, 2 ozs. 25c, ¼ lb. 30c, lb. \$1.50.

SPINACH

Spinat (Gr.) Spinace (It.)
 An easily grown plant, the seed of which may be planted in the fall to secure good spinach early in the spring or even throughout the winter. The better and richer the soil, the larger and more tender the leaves will be. As a field crop for the market garden, use 8 pounds of seed per acre. For the home garden use one-half ounce for 100 feet of row.

Bloomsdale Savoy The variety most generally used in the East, and especially throughout the South for shipping. Leaves large, round and thick, very much savoyed and rich deep green. One of the earliest varieties. Seed round. Oz. 10c, lb. 75c.



LONG SEASON SPINACH.

Long Standing A deep green variety with rather elongated smooth leaves. Seed, round. Stands a long time without running to seed. Oz. 10c, lb. 75c.

Victoria A long-standing variety with round, slightly savoyed leaves. Deep green and hardy. Forms good, edible leaves early and continues to produce leaves for a long period. Oz. 10c, lb. 75c.

Norfolk Savoy Forms a dense rosette of thick, tender and succulent crumpled or blistered leaves of dark green color. With this variety spinach may be continuously grown in any home garden. The best variety to be sown in the spring and at intervals for a successional summer supply. It is invaluable to both home and market gardeners. Oz. 10c, lb. 75c.

Prickly The variety commonly used for market in California. Is very hardy and easily grown; bears large, smooth leaves, which are shaped like an arrow point. Color, bright green. Seed irregular with three or four sharp points. Oz. 10c, lb. 60c.

New Zealand A plant with thick, fleshy texture and soft crystalline leaves. Is not like the ordinary spinach in appearance, but it is used in the same way. Oz. 10c, lb. \$1.00.

Round, Thick Leaved A large-leaved, bright green variety. Leaves rather smooth and rounded at the top. A good variety for late spring and summer. Seed round. Oz. 10c, lb. 75c.

Kuerbiss (Gr.)

SQUASH

Zucca (It.)

The summer varieties come into use early in the summer, but being sensitive to frost the seed cannot be sown until late in April. The seed should be planted in hills four feet apart, using four ounces to 100 hills. The winter varieties are also unable to resist frost, and should be planted at the same time. The fruit does not mature until late in the fall, and, having a very firm, hard shell, keeps well, and with a little care squashes can be had all winter and until late in the spring. In gathering winter squashes, it is important to protect the stems, since if broken off the fruit will not keep so well. Plant in hills six to eight feet apart, using two or three seeds to the hill. Use eight ounces to 100 hills, or two pounds to an acre. Moderately rich soil will grow good squashes.

Mammoth Summer Crookneck A large golden-yellow variety, thickly warted, is eighteen inches long, brittle and tender. Plants are bush and very prolific. This is an improved strain of the old variety and considerably larger. Oz. 10c, lb. \$1.00.

Burpee's Fordhook Squash A most desirable running variety for both summer and winter use. The vines are of strong, vigorous growth and wonderfully productive. Fruits oblong in form, eight to ten inches in length, slightly ridged, smooth thin yellowish skin; flesh very thick and of a light straw yellow. If gathered young for cooking, no other squash approaches it in flavor, while if allowed to ripen on the vine they can be stored and will keep in excellent condition until late the following June. Either for baking like sweet potatoes or making pies during the winter the quality is unsurpassed. Oz. 15c, lb. \$1.00.

Burpee's Bush Fordhook Squash Being of "bush growth," the plants can be grown much more closely together. The fruits are rather shorter and thicker than those of the running type; they are also thicker fleshed and have a smaller seed cavity, but unfortunately do not come as true to type. Our Fordhook squash is about a week later than the Early White Bush; it is much sweeter and better flavored. Oz. 15c, lb. \$1.00.

The Faxon A very desirable variety for the home garden, very productive, of medium size (five or six pounds), fine-grained, dry, sweet, a good keeper, uniform in shape, but varied in color. This variation in color is a distinct feature of the squash. Oz. 10c, lb. \$1.00.

Mammoth White Bush Scallop An improvement on the old variety, larger, pure white and superior in quality. Oz. 10c, lb. 75c.



Hubbard Squash

In color, the flesh dry and sweet in flavor. It grows to large size, is a fine keeper and shipper. Its cooking qualities unsurpassed. Oz. 15c, lb. 75c.

Mammoth Chili The largest variety, attaining under special cultivation enormous size. Its cooking qualities unsurpassed. Oz. 15c, lb. \$1.00.

Boston Marrow This grows larger than either of the preceding, but is not of so deep color; skin thin, yellow, with pinkish tint; desirable for pies, not so dry as the Hubbard. Oz. 10c, lb. 75c.

Delicious One of the thickest meated and very best in quality, not excepting Hubbard. Although at any time excellent, does not acquire its best quality until winter. Oz. 15c, lb. \$1.00.

Golden Hubbard A distinct sort, of the shape and general character of the Hubbard, but a little smaller, earlier to mature, and a rich orange-red instead of the dark olive-green of the old Hubbard, while the flesh, which is thick, is a little deeper colored, of fully as good quality, fine-grained and dry. Oz. 10c, lb. \$1.25.

Warted Hubbard This is a distinct strain of the famous Hubbard and is an ideal winter squash for marketmen. The shell is deeply warted and a dark green.

SWISS CHARD

Giant Perpetual ("Cut-and-Come-Again") Spinach Swiss Chard This, though a variety of Chard, is to all practical purposes a giant spinach, the huge curled leaves being tender and cooking readily, with a decided spinach flavor. Its great merit is that it will supply the greens from spring until late in the fall. The large midribs can be cooked and served like asparagus. If wanted for greens cut when 6 inches high just above ground and it will grow out again. Oz. 10c, lb. \$1.00.

SWEET HERBS

CULTURE.—Sow in early spring, at the time when the trees begin to leaf, in ordinarily good and well drained garden soil, in rows 12 to 24 inches apart. Cover seed lightly. Thin or transplant to stand 6 to 12 inches apart in the rows. Cultivate frequently and keep free from weeds.

	Packet
Anise, seeds aromatic.....	5c
Balm, has medicinal qualities.....	5c
Basil, sweet.....	5c
Borage, leaves used for salad.....	5c
Caraway, seeds aromatic.....	5c
Chives, Edible.....	5c
Coriander, seeds aromatic.....	5c
Dill, seeds aromatic and medicinal.....	5c
Fennel Sweet, seeds aromatic.....	5c
Horehound.....	5c
Lavender, leaves aromatic.....	5c

	Packet
Marjoram, leaves used in seasoning.....	5c
Mint (peppermint).....	5c
Rosemary, aromatic.....	5c
Rue, medicinal qualities.....	5c
Saffron, medicinal qualities, also dyeing.....	5c
Sorrel.....	5c
Sage, culinary herb.....	5c
Savory Summer, culinary herb.....	5c
Tarragon or Estragon (roots).....	5c
Thyme, culinary herb.....	5c
Wormwood, medicinal qualities.....	5c

TOBACCO SEED

Havana Tobacco Seed, per oz. 75c, per pkt. 10c.

Liebesapfel (Gr.)

TOMATO

Pomodori (It.)

As tomatoes are very sensitive to frost, they cannot be set in the open field until about May 1st. The seed must be sown in well protected hotbeds, sowing same about March 1st. A hardy and stocky plant is had by transplanting the small plants in the bed a few weeks before transplanting to the field. Or when about four inches high, the top may be pinched off and the plant grows stockier.

Sow the seed broadcast, using one ounce to about three square feet of area, which will yield plants enough to set an acre. In the field set tall varieties six feet apart and dwarf varieties three feet apart. A slight trellis is advisable in the garden. A moderate amount of water should be applied at the roots at regular intervals.

Bonney's Best Early

An extra early variety having great favor with the market gardeners. Vines vigorous and productive, fruit solid without hard core. Color bright scarlet. Fine, early, handsome, especially profitable for market gardeners' use. Oz. 35c, lb. \$3.50.



June Pink The June Pink tomato in habit of growth is similar to the Earliana. The plant is compact, branching freely, with fruit hanging in clusters of six to ten fruits, both in the crown and at the forks of the branches. It ripens fully as early as the Sparks Earliana and quite ten days to two weeks ahead of Chalk's Early Jewel. Fruit of medium size, uniform, smooth, and attractively shaped, without cracks or any green core. Continues to bear and ripen fruit until frost. Oz. 35c, lb. \$3.00.

Chalk's Early Jewel

A wonderful new variety. In that it is early and bears continuously throughout the season. The fruit is large, smooth, uniform, and well ripened clear to the stem, and the flavor and quality are especially fine. Color, bright scarlet. Oz. 25c, lb. \$3.00.

Earliana (Sparks)

The earliest tall variety, forming ripe fruit much earlier than any other variety. The fruit is large, smooth, of a bright

scarlet color, and of fine quality. Very valuable for early market use. Pkt. 10c, lb. \$2.75.

Beauty

A rather early, tall variety; very prolific, with good-sized, smooth fruit of a purplish-carmine color. Oz. 25c, lb. \$2.25.

Livingston's Dwarf Stone

Another splendid new variety from Livingston. This is what he says of it: "The same sort of tomato as Dwarf Champion, but the vine is of stronger growth, and the fruit is of double the size. It is equally early, is equally prolific. The shape of the fruit is perfect. It is very solid, ripens very evenly and is of excellent quality. Oz. 35c, lb. \$3.00.

Dwarf Champion

A dwarf variety, sometimes called the tree tomato on account of its upright growth and its ability to stand alone without trellising. Fruit medium-sized, smooth, uniform, and of a purplish carmine color. Oz. 25c, lb. \$3.00.

Matchless

A tall-growing, prolific variety with large fruit, which is rather flattened, smooth and uniform. Color, bright scarlet. For canning and general main crop market, there is no better tomato grown. Extra selected strain. Oz. 40c, lb. \$2.75.

Ponderosa

An extremely large, irregular-fruited variety. Vine tall, and fruit very solid and purplish-carmine in color. Rather coarse and of fair quality only. Oz. 40c, lb. \$4.00.

Red Cherry

The fruit is small and globe-shaped, about one to two inches in diameter. It is very valuable for preserving. Oz. 25c, lb. \$2.50.

Red Pear Shaped

As the name implies, the fruit is shaped like a pear—small at the stem and enlarged at the top. It is small, being about two or three inches long. It is bright scarlet. Oz. 25c, lb. \$2.50.

Golden Queen

(Bright yellow.) Best large yellow tomato. Much like Paragon, except in color. Always smooth and ripens early. Quality excellent in all respects, either for slicing or preserving. Queen of all the yellows. Oz. 35c, lb. \$3.00.

Pear-Shaped Yellow

(Bright yellow.) A pretty tomato, similar to Pear-Shaped Red, except in color. Oz. 30c, lb. \$3.00.

Steckrube (Gr.)

TURNIPS

Pastinaca (It.)

While turnips are a favorite fall and winter vegetable, they may also be had in the spring by proper sowings. They are of easy culture, but need well-worked, rich soil to insure a quick, uninterrupted growth, when they will be tender and free from woodiness.

For fall and winter use sow the seed in August, in rows 10 to 18 inches apart, using one ounce to 250 feet of row, thinning the plants when very young to three or four inches apart. For spring use sow in January. For field culture sow in rows about two feet apart, using one to three pounds of seed per acre.

Early Snowball A medium globe-shaped variety of pure white. Very solid and of the best quality. Oz. 10c, lb. 75c.

Early White Flat Dutch (Strap Leaf) A medium-sized, flat variety; clear white, early, and of fine flavor. A fine table variety. Oz. 10c, lb. 75c.

Early White Milan Roots flat, smooth and symmetrical; pure white. Top very small, upright and compact, permitting close planting. The earliest and much the best of any extra-early white variety. Oz. 10c, lb. 75c.

Early Purple-Top Milan Differs from the preceding in that the roots are not quite so thick and are purple on top. Oz. 10c, lb. \$1.00.

Early Purple-Top Flat A well-known variety and very extensively grown. Roots smooth, white, with the upper portion purplish red. Oz. 10c, lb. 60c.

Early Purple-Top White Globe One of the handsomest varieties, the upper portion of the root being a purplish red, the lower pure white. A rapid grower, attaining a marketable size sooner than other large globular varieties. Of the best quality and an excellent keeper. Owing to its strong growth should be more severely thinned than other early varieties. We offer New England grown seed of a selected strain, which repeated trials have shown to be much superior to those generally offered. Oz. 10c, lb. 60c.

Cow Horn A long white turnip. Grows to a large size, standing half out of the ground. It is fine flavored and desirable. Cow Horn turnip sown in connection with Rape is one of the newly recommended things for green manuring purposes. Oz. 10c, lb. 60c.

Ruta-bagas or Swedish Turnips

Laing's Improved Swede One of the earliest; handsome round variety; fine for the table. Oz. 10c, lb. 60c.

Sweet German, or Russian White, sweet, excellent; a first-rate keeper. Oz. 10c, lb. 60c.

Carter's Imperial Swede This is the best of the Swede turnips. Oz. 10c, lb. 60c.

American Purple-Top Very hardy and productive; flesh yellow, solid, sweet; good for stock or table use. Oz. 10c, lb. 60c.

Long Island Improved Bred from the "American Purple Top," over which it is a great improvement, being nearly double the size; an immense yielder and good keeper; flesh rich yellow, of fine quality. Oz. 10c, lb. 60c.



Ruta Baga American Purple Top Turnip

Names of a few gardeners who have dealt with this house continuously from 31 to 45 years:

Wm. Clark, Solvay.....	45 yrs.	Henry O'Neil.....	32 yrs.
Charles B. Day, Skaneateles.....	32 "	John Butler, Onondaga, died 1916.....	43 "
J. N. Rose, Syracuse.....	47 "	A. H. Ballard, East Onondaga.....	34 "
S. B. Babcock, Fulton.....	38 "	Geo. Craddock, Onondaga, died 1912.....	43 "
Albert Wright, Syracuse, died 1915.....	46 "	Henry Wright, Syracuse, died 1912.....	43 "
Michael O'Brien, Syracuse, died 1913.....	39 "	Henry G. Day, Seneca Falls.....	37 "
William Lambert, Salina.....	38 "		

Also hundreds of others who have dealt with us 8 to 30 years.

Seneca Falls, N. Y., Dec. 18, 1916.

Mr. F. H. Ebeling, Syracuse, N. Y.

Dear Sir—Having purchased seeds from you since 1879, I feel very confident in saying that your seeds are among the best that grow. For several years I have used your Iowa Gold Mine Ensilage Corn, and have had such good results that the past year I sold many bushels to my neighbors. The Alberta Cluster Oats yielded 65 bushels per acre. From 4 bushels of your Telephone Peas I picked 135 bushels marketable peas. I also have 50 acres of the best new seedling that I ever had, from your clover and timothy seed.

Yours very truly,

HENRY G. DAY,
Farmer and Market Gardener.

SELECT FLOWER SEEDS.

- Abobra** (Gourds) Beautiful variety of climbing gourd with elegant foliage. 5c pkt.
- Abronia** (Sand Verbena) Trailing, annual, sweet-scented clusters like verbena, lasting in bloom a long time; for rock-work or hanging-baskets. Height 12 inches. 5c pkt.
- Abutilon** (Chinese bell flower or flowering maple) Free flowering, perennial shrub; fine for indoors. For outdoor sowing before April. Will bloom first season. 10c pkt.
- Acacia** Half hardy shrub having ornamental foliage, beautiful shades of yellow, globular flowers. Soak seed in warm water before sowing. Height 6 to 10 ft. Mixed 10c pkt.
- Aconitum** (Monk's hood or Wolfs bane) Hardy, perennial, long spikes of odd shape blue and white flowers, adapted to shady corners or among shrubbery; 3 to 5 ft. 5c pkt.
- Acroclium** Pretty, annual everlasting, 15 inches high, lovely white or rosy pink flowers, fine for border. Sgl. or dbl. 5c pkt.
- Adlumia** Hardy white perennial, 2ft. high, pure white double flowers, bloom from spring until frost, fine for cemetery decoration. Flowers first season if sown early.
- Adlumia** (Mountain fringe or Allegheny Vine) A hardy biennial climber, will resow itself year after year, feathery foliage resembling Maiden-hair Fern, flowers tube-shaped, flesh colored completely covering the plant, fine for trellises, stumps, etc. 10c pkt.
- Adonis** (Pheasant's eye) Flos Adonis, Showy, hardy, annual, of easy culture, fine cut foliage, blooms a long time; dark crimson flower with light center. Height 1 ft. 5c pkt.
- Ageratum** (Floss Flower) Fine bedding sort, literally a sheet of bloom from early summer until frost; not liable to be spoiled by rain, flowers not liable to fade; easily raised from seed. Sow in March or in hot-bed and transfer into open ground in June when weather is suitable; valuable for winter flowering for conservatory. 5c pkt.
- Blue Perfection** Dark blue, largest flowering, fine bedder. 10c pkt.
- Cope's Pet** Azure blue, fine light blue sort for edging, 10c pkt.
- Dwarf Princess Pauline** Beautiful, compact, sky blue, white center, very exquisite. 10c pkt.
- Mexicanum** Lavender blue, 11-2 ft. 5c pkt.
- Imperial Dwarf White** Height 8 inches. 5c pkt.
- Agrostemma** (Rose of Heaven) Free blooming, hardy, perennial, blooming first season, height 1 to 2 ft. Mixed 5c pkt.
- Alyssum** (Mad-wort) Pretty little plants for beds, vases, baskets, edging, etc. Bloom profusely all summer, also useful for winter. Very sweet-scented.
- Little Gem** (or Carpet of Snow) 4 to 6 inches in height, each plant covering a circle of 15 to 30 inches. 5c pkt.
- Sweet Alyssum** Trailing flowers, white. 5c pkt.
- Tom Thumb** Compact, dwarf, fine for edging, white. 5c pkt. 30c oz.
- Saxatile Compactum** (Basket of Gold,) handsome yellow flowers, hardy perennial, blooming first season, fine for rock work, 1 ft. 5c pkt. 30c oz.
- Amaranthus** Brilliant foliaged annuals, 3 to 5 ft. Useful in borders or centers of large beds. Do not plant too closely.
- Brilliant** Foliage bright red, ends of branches carmine-rose, red and yellow. 10c pkt.
- Caudatus** (Love lies Bleeding) Blood red, drooping foliage, 3 ft. 5c pkt.
- Salicifolius** (Fountain Plant) Pyramidal, drooping habit. 5c pkt.
- Sunrise** Bronzy Crimson to brilliant scarlet. Fine for parks and large beds, 3ft. 10c pkt.
- Sulphurine** Leaves dark green, bright sulphur yellow. 10c pkt.
- Tricolor** (Joseph's Coat) Leaves red, yellow and green, 3 ft. 5c pkt. 30c oz.
- Ammobium** (Winged Everlasting) Grandiflorum, Pretty Border, annual ever-lasting, flowers white with yellow disc. 5c pkt.
- Ampelopsis** (Boston or Japanese Ivy) Hardy, perennial climber, olive green leaves turning to scarlet in fall. Popular climber, fine for brick or stone walls. 10c pkt.
- Anemone** (Windflower) Hardy, perennial, large flowers, fine for bouquets. Mixed colors. 10c pkt.
- Antirrhinum** (Snap Dragon) White, yellow, scarlet, each 10c pkt. mixed colors. 10c pkt.
- Aquilegia** (Columbine) Charming, hardy, perennial, 1 to 3 ft., profuse bloomer; blue, white, rose, yellow, purple, striped, etc. Fine for borders. Sgl. mixed 5c pkt. Dbl. mixed 5c pkt.
- Arabis** (Rock Cress) Alpina very early, pure white, spring flower, appear as soon as snow disappears. Fine for rockeries or edging. 6 inches high. 10c pkt.
- Arctotis** Grandis, Beautiful new annual, 2 to 3 ft. high, large strong pure white flower embellished with yellow center, of the easiest culture. 10c pkt.
- Aristolochia Siphon** (Dutchman's Pipe) A quick growing climber with large heart shaped leaves. 5c pkt.
- Armeria** (Sea pink or cushion pink) Very pretty edging plant, bearing large tufts with rosy pink flowers, hardy perennial. 10c pkt.
- Asparagus Plumosus Nanus** Graceful climber, finer than most delicate ferns. Will last for weeks after being cut, easily cultivated. 25c pkt.
- Sprengeri** One of the best for hanging baskets or general purposes, fronds 4 ft. long. 10c pkt.
- Verticillatus** Graceful, hardy perennial climber, scarlet berries. 10c pkt.
- Asperula Odorata** (Sweet Woodruff) Fragrant leaves and stems, grown in shaded places, white flowers. 5c pkt.
- Asters** are now one of the most important summer and autumn flowers. Their immense popularity and world-wide demand shows their adaptability to any soil or climate, there being early medium and late flowering sort which extends the blooming period from early July until frost. For the best results the ground should be very rich. Good results can be obtained from ordinary garden soil.
- Branching Varieties** 11-2 ft. high., very double, beautifully incurved. Crimson 10c, blue 10c, pink 10c, white 10c, rose 10c, mixed 10c.

Asters (Continued).

- Branching Paeony Flowered** In vigor of growth, size of bloom and other qualities this type is unequalled. Height about 18 inches, free branching habit with long stems. Crimson 10c, blue 10c, white 10c, mixed 10c.
- Comet** Beautiful with long curled petals resembling the Japanese Chrysanthemum, height 18 inches. Carmine 10c, pink 10c, blue 10c, mixed 10c.
- Giant Comet** Similar to the above but of stronger growth, 18 to 24 inches high. Pure white 10c, white and rose 10c.
- Giant Branching Comet** Very strong growth, 18 inches high, branching habit, flowers of large size on long stems. 10c pkt.
- Queen of the Market** The earliest flowering Aster, blooms three weeks in advance of the general run, flowers good size on long stems. Fine for cutting. Crimson 10c, pink 10c, purple 10c, white 10c, mixed 10c.
- Victoria** Magnificent bedding or cutting variety, flowers large beautifully imbricated, 1 1-2 ft. high. Scarlet 10c, purple 10c, blue 10c, pink 10c, white 10c.
- China Mixed** Very fine, all colors 5c.
- Quilled Aster** Double or quilled petals, fine for bouquets. 2 ft. 5c pkt.
- Crown or Cocardeau** Very showy, double white center, mixed colors, 1 1-2 ft. high 10c pkt.
- Daybreak** Grand variety of symmetrical growth and habit. 18 inches high, globe shaped double, delicate, pink tint. 15c pkt.
- Dwarf Chrysanthemum** Large flowering, dwarf, double, excellent for plants and pots. Mixed 10c pkt.
- Fire-Ball** Magnificent, double, brilliant, deep scarlet 10c.
- Japanese or Tassel** Entirely distinct, new pyramidal shape, 18 inches high, long stems, flowers five inches across, wavy twisted, needle shaped petals, very graceful. Mixed 10c pkt.
- Ostrich Feather** Magnificent, resembling the Comet, flowers of immense size of loosely formed petals, equaling the best Japanese Chrysanthemums. White or pink 15c each.
- Rose flowered** Large double, pyramidal, height 2 ft. Mixed colors 10c.
- Snow Ball** A beautiful distinct sort, short petals, pure white 10c.
- Washington** Splendid, very large, double, diameter 6 inches. White 15c.
- Perennial** Single, hardy. Does well in any garden soil. If sown early will flower in early season. 10c pkt.
- Bachelor's Buttons** (See Globe Amaranth).
- Balloon Vine** (Love-in-a-Puff) Rapid growing annual climber, white flowers, seed vessels look like miniature balloons. 5c pkt.
- Balsams** (Lady Slipper) Double, camellia flowered type, and old favorite, gorgeous brilliant colored, double flowers in great profusion, easily cultivated, 2 ft. high.
- Prince Bismarck** Salmon, pink, double. 10c pkt. Scarlet, yellow, violet and mixed each 5c. White 10c.
- Baptisia** (False Indigo) Beautiful, hardy, perennial, pea-shaped flowers on spikes 6 inches long, bright blue 2 1-2 ft. 5c pkt.
- Bartonia** Showy yellow flowers, very brilliant, cannot be transplanted. 5c pkt.
- Begonias** Fine bedding variety, equal to geraniums, sturdy growth, 1 ft. high, forming dense bushes completely covered with flowers from May until frost. Unequaled as pot-plants for winter flowering and will remain in bloom the entire year. Easily raised from seed. Double mixed 25c, single mixed 15c.
- Tuberous Rooted Begonias** Plants of great value for summer decoration or window gardening, bloom first season from seed if sown in February, transplanted as soon as weather permits, produce flowers the entire summer. Double mixed 25c, single mixed 25c.
- Ornamental Leaved Begonias** Beautiful, variegated foliage. Mixed 25c.
- Bellis** Double Daisy, very handsome spring-flowering plant. 5 pkt.
- Brachycome** (or Swan River Daisy) Dwarf, annual, profuse bloomer, pretty blue or white flowers. 5c pkt.
- Calceolaria** (Lady's Slipper) Ornamental plant with mass of beautiful pocket-like flowers, blooms early and very fine for decorating green-house or conservatory.
- Hybrida Grandiflora**, 20 inches high. Mixed, 25c.
- Tigrina** Large tiger spotted brilliant colors 25c.
- Calendula** (Pot Marigold) Very showy, free-flowering until frost, hardy annual, grows in any good soil, fine for beds or mixed borders, fine for pot culture, height 1 ft.
- Meteor** Large double yellow, striped with orange 5c.
- Orange King** Large double orange red flowers 5c.
- Pure Gold** Fine Golden Yellow 5c.
- Mixed** per pkt. 5c.
- Pluvialis** (Cape Marigold) White daisy-like flowers, under side of petals lilac, 5c.
- Calliopsis** (See Coreopsis) Showy, free-flowering annual, blooms all summer, fine for cutting and massing. 5c pkt.
- Coronata** Large yellow, fine for bedding 5c.
- Golden Wave** (Drummondii) Large golden yellow with brown center, fine for borders. 5c.
- Tinctoria** Golden with garnet eye 5c.
- Nigra Speciosa** Crimson 5c.
- Campanula** (Bellflower) Favorite, hardy herbaceous with great profusion of bell flowers, thrives in light rich soil.
- Carpatia** Blue and white mixed, bloom the whole season, 6 inches 5c.
- Persicifolia Grandiflora** Fine hardy bell flowers 2 to 3 ft. blue or white. Mixed 10c.
- Canary-Bird Vine** (Tropæolum Canariense) Handsome annual, rapid climber, charming little canary-colored blossoms bearing a fancied resemblance to a bird with wings half expanded 5c.
- Candytuft** (Iberis) A great favorite, fine for cutting, looks best in beds or masses. Sow in spring, will bloom until frost, very hardy, easily cultivated. Single plants look well and bloom profusely, 1 ft.
- Carmine** 5c.
- White** 5c.

Candytuft (Continued)**Crimson** 5c.**Empress A** complete mass of pure white flowers 10c.**White Rocket** 5c.**Lavender** 5c.**Mixed colors** 5c.**Perennial mixed** 10c.

Canna (Indian Shot) Without exception one of the handsomest bedding plants. Soak the seeds in warm water until they show evidence of swelling. When the second leaf is out pot singly and keep under glass until proper season for planting out. Mixed colors 10c.

Canterbury Bell (*Campanula Media*) Sgl. mixed 5c. Dbl. mixed 5c.

Cup and Saucer (*Calycanthema*) Fine white, blue and rose, resembling cup and saucer, 5c.

Carnation (See *Dianthus*) Great favorite for their delicious fragrance and richness of color, indispensable for winter or summer culture. Dbl. mixed, 10c.

Marguerite Carnations Very popular, as they begin flowering a few weeks from time of sowing, half dwarf, strong, requiring no support, produce long, strong stems, abundant large double, beautifully fringed, highly-scented flowers.

Mixed colors 10c.

Castor Oil Bean (See *Ricinus*).

Celosia or Cristata or Cockscomb Varieties Free-blooming annuals, plant in light soil not too rich, grand for border and fine for pots.

Empress Combs of Colossal size, known to measure 45 inches from tip to tip; rich crimson 10c.

Glasgow Prize Dark Crimson 10c.

Dwarf 8 inches high, sometimes measure 2 ft. across 10c.

Mixed Dwarf 5c.

Centaurea Under this name is included the popular annuals like Corn Flower, Blue Bottle, Ragged Sailor, Sweet Sultans, etc. Great favorites, fine for cut flowers; white-leaved sorts, or Dusty Millers are largely used for bedding, vases, etc.

Sweet Sultans (*Centaurea Imperialis*) Beautiful, sweet-scented, strong stems, when cut will stand for several days in good condition of easy culture. Mixed colors 10c. Named colors 10c.

Giant Sweet Sultans (*Centaurea Oderata*) or Giant Cornflowers, easy to cultivate flowers 2 to 4 inches in diameter, very graceful, sweet-scented.

Chameleon Pale yellow turning to a beautiful rose 10c.

Oderata Reddish lavender, very fragrant 10c.

Margaritæ White 10c.

Cheiranthus (See Wall Flower) Mixed 5c pkt.

Chrysanthemums Annual sorts, showy, effective garden favorites. Dbl. mixed 10c pkt. sgl. mixed 10c pkt.

Cineraria Seed may be sown from May to September in succession. Where only one sowing is made July should be preferred. Cinerarias grow so freely that the seedling may go straight from seed-pans to thumb-pots. For transplanting, plant in a cold frame facing north, if possible. When pots become full of roots shift into larger ones until the flowering size is reached.

Dwarf Mixed 25c per pkt.

Tall Mixed 25c per pkt.

Double Flowering 25c per pkt.

Stellata (Star Cineraria) A charming variety with large spreading panicles of starry flowers. Same colors as the common Cineraria. The grace and elegance of the plant and flowers make them very effective for house or conservatory decoration; especially fine for church decoration and very useful for cutting. 35c.

Cineraria (White Leaved Sorts)

Dusty Miller Fine for bedding and margins, valued for their beautiful, downy, silvery foliage, half hardy perennial; 2 ft.

Maritima Candidissima Silvery foliage 5c pkt.

Acanthifolia Silvery foliage 10c pkt.

Clematis Rapid-growing climber, fine for arbors and verandas. Seeds are slow to germinate, and should be soaked in warm water 24 hours; hardy perennial mixed colors. 10c pkt.

Clianthus (Australian Glory Pea) Beautiful, tender, perennial shrub with clusters of brilliant pea-shaped flowers, 3 inches in length, with large black blotch for center. 10c pkt.

Cobæa (Cups and Saucers Vine) A rapid climber, fine for trellises, arbors, etc., clings to any rough surface. Place seeds in the ground edgewise and cover with light soil.

Purple 10c pkt. pure white. 10c pkt.

Coccinea Indica (Scarlet-fruited Ivy-leaved Climber) Handsome, annual, gourd species with beautiful glossy ivy-like leaves, contrasting with the fine snow white bell-shaped flowers and bright carmine fruit. 10c pkt.

Coleus (Flame Nettle) An attractive foliage plant for house or garden, very interesting to grow from seed, easily raised; sow in March or April. 10c pkt.

Convolvulus (Morning glory) Climbing varieties, very popular and one of the most free-flowering, rapid-growing plants in cultivation; doing well in almost any situation, with beautiful brilliant flowers; annuals, 15 ft. Mixed colors 15c oz. 5c pkt. Dwarf per oz. 15c. 5c pkt.

Coreopsis, (See *Calliopsis*) A very fine hardy plant with large, showy bright, yellow flowers, produced in great abundance from June until frost, especially fine for cut flowers having long stems and lasting in good condition a week or more. These grow from seed, flowering the first year if sown early. 5c pkt.

Cosmos Beautiful autumn-blooming plant, producing thousands of beautiful flowers in pure white, pink and crimson shades; fine for autumn decoration when other flowers are scarce. Sow in spring in open ground when danger of frost is over, or may be started under cover and transplanted. Set about 18 inches apart in rows or in masses in beds. When about a ft. high pinch the tops out to induce a bushy growth., 2 1-2 to 4 ft. in height.

Crimson, 5c.**Pink** 5c.**White** 5c.

Cosmos (Continued)**Mixed** 5c pkt.**Dwarf** 5c pkt.**Cucurbita** (See Ornamental Gourd)**Cyclamen** Charming plant with richly colored foliage, fragrant flowers. Great favorites for winter or spring. Sow in spring or autumn.**Persicum** Choicest mixed. 15c pkt.**Pure white, dark red, rose** each 25c pkt.**Cyperus** (Umbrella Plant)**Alterdifolius** Excellent for growing in water or damp places. Very ornamental house plant. 10c.**Cypress Vine** (*Ipomaea Quamoclit*) A favorite summer climbing annual, with feathery foliage and star-shaped flowers borne in clusters.**White** 5c pkt.**Scarlet** 5c pkt.**Rose** 5c pkt.**Mixed colors** 5c pkt.**Dahlia** One of the best late summer and autumn flowering sorts, very popular. The double sorts will bloom first season if sown early. Single will bloom first season if sown in the open ground. Many prefer the single sorts to Cosmos, having the larger variety of colors and longer season of bloom.**Double, finest mixed** 10c.**Single, finest mixed** 10c.**Single Tom Thumb, dwarf, 1 ft.** 10c.**Datura** (Trumpet Flower) Ornamental annuals, large showy flowers; 2 to 3 ft. Dbl. and 10c pkt.**Delphinium** (Perennial Larkspur) One of the handsomest hardy perennials, splendid flowers and curiously cut leaves; for permanent beds and borders they are indispensable.**Zalil** (Hardy Yellow Larkspur) Produces very long spikes of 40 to 50 sulphur yellow blossoms each 1 inch in diameter; flowers from June to August, plant thrifty and bushy; 3 to 4 ft. 10c pkt.**Formosum** Popular for groups, tall spikes of dark blue flowers with white eyes; 2 to 3 ft. 5c pkt.**Nudicaule** Large scarlet flower; 1 1-2 ft. 10c pkt. Mixed finest single 5c pkt. mixed 10c pkt.**Dianthus or Pinks** A magnificent sort embracing some of the most popular flowers in cultivation, of great variety and brilliancy with profusion of bloom. The sorts classed as annuals may be sown out-of-doors when danger of frost is past. In a few weeks time they are a mass of bloom continuing until frost; 1 ft.**Double Annuals****Chinensis Fl. Pl.** (China or Indian Pink). Mixed colors 10c.**Heddeewigi Fl. Pl.** (Japan Pink) Double mixed 10c.**Snowball** Double white, fringed, very fine 5c pkt.**Imperial Fl. Pl.** (Double Imperial Pink) Mixed 10c.**Salmon King** A double flowering variety, finely fringed flowers of a brilliant salmon color 10c changing as they fade to a salmon-rose; charming for beds or borders. 10c pkt.**Single Annuals** All single sorts have large flowers 2 to 4 inches in diameter, fine for beds or borders; 1 ft. high.**Heddeewigi Nobilis** (Royal Pink) Beautifully fringed, colors run from white to dark red 10c**Heddeewigi** (Japan Pink) 10c.**Laciniatus Fl. Pl.** (Double Fringed Pink) Large, double, showy flowers, with fringed edges and beautifully striped; mixed various colors. 5c.**Hardy Garden Pinks** The varieties are well adapted for beds and borders; delightful, refreshing, spicy odor, should be in every garden where cut flowers are wanted.**Semperflorens** (Ever-blooming hardy garden Pinks) Very beautiful, sweet-scented, double semi-double and single in great diversity of colors, mixed colors. 25c.**Dianthus** (See Carnation) Carnations are general favorites for their delicious fragrance and richness of colors. They are indispensable for the green-house in winter and the garden in summer. The Marguerite is one of the best for summer flowering.**Fine Double Mixed** The best for garden culture 10c pkt.**Marguerite** These are the most popular of carnations with the amateur, as they begin flowering within a few weeks from the time of sowing. Our strain is of semi-dwarf, robust habit requiring no artificial support, and produces on long strong stems an abundance of large double, beautiful fringed, highly scented flowers. Separate colors 10c. Mixed, all colors, Marguerite Carnation 10c.**Didiscus** Very pretty annual, blooms profusely from July to November, pale lavender blossoms excellent for cutting. 15c pkt.**Digitalis** (Foxglove) Handsome ornamental hardy perennial plant, easily grown, fine for shrubberies; 3 ft. Mixed colors. 10c pkt.**Dolichos** (Hyacinth Bean) Rapid annual climber with large clusters of handsome flowers producing later in place of flowers, pods of a deep purple, very ornamental, mixed colors. 10c pkt.**Dracena** (Dragon Plant) Fine ornamental leaved plant. Mixed colors. 25c pkt.**Echinocystis** (Wild Cucumber Vine) Quickest growing vine known, fine for covering trellises, fences, etc. 5c pkt.**English Daisy** (*Bellis Perennis*) A favorite almost hardy perennial blooms from early spring until late in summer, easily raised from seed, 4 inches high. Dbl. mixed, finest quality 10c. Red, white or pink 10c.**Erigeron** (Flea-bane) An attractive, asterlike flower, 1 inch across, purplish-rose with golden center, hardy perennial, blooms first year from May until frost if sown early. 20c pkt.**Eryngium** (Sea Holly) Handsome ornamental, hardy plant 2 to 3 ft. high. Fine for drying for winter bouquets. 15c pkt.**Eschscholtzia** (California Poppy) Fine annual for beds, border or masses, bloom until frost; 1 ft. Sgl. mixed 5c pkt. dbl mixed 6c pkt.

- Euphorbia** Strong, tall-growing annual, attractive foliage. 10c pkt.
Forget-me-not (See *Myosotis*) 5c.
Four o'clock or *Mirabilis* 5c.
Fox Glove (See *Digitalis*)
Fuchsia (Lady's Eardrops) Well-known sort of easy culture, for house or garden, mixed colors 25c pkt.
Gaillardia (Blanket Flower) Splendid showy annual, remarkable for profusion, size and brilliancy of flower, bloom until frost, fine for beds, borders or cutting; 1 1-2 ft. Mixed colors, annuals 10c pkt. Mixed colors, perennials, 5c pkt.
Geranium (*Pelargonium*) Double mixed, fine color 30c pkt.
Globe Amaranth (*Gomphrena*) Known as Bachelor's Buttons, fine bedding plant, flowers can be dried and be used in winter bouquets; 2 ft. mixed colors. 10c pkt.
Gloxinia A superb greenhouse sort with magnificent rich colored flowers; do best in equal mixture of peat, loam and sand, mixed colors. 25c pkt.
Godetia An attractive, hardy annual, profuse, showy flowers of varied colors; 1 1-2 ft. Mixed colors. 10c pkt.
Gourds Ornamental (*Cucurbita*) Rapid-growing, annual climbers, ornamental foliage; 1 to 20 ft. Mixed colors. 5c pkt.
Grasses, Ornamental These serve the double purpose of rendering mixed flower-beds or borders attractive in summer and for use in a dried state in winter bouquets, for large beds or groups on lawns, nothing gives a finer effect; largely used in public parks.
Arundo Donax (Great Reed) Hardy perennial. 10c.
Briza Maxima Fine for grass bouquets. 5c.
Bromus Briziformis Graceful, drooping perennial. 5c.
Coix Lachrymae (Job's Tears) Broad, cornlike leaves, annual. 5c.
Erianthus Ravennae (Hardy Pampas) Beautiful perennial. 5c.
Gynierum Argenteum (Pampas Grass) Perennial, blooms the second season. 10c.
Stipa Pennata (Feather Grass) Perennial, beautiful white, delicate begins to bloom the second season; 2 ft. 5c.
Gypsophila Pretty, free-flowering plant for rock work, edging, etc. Mixed colors. 5c pkt.
Helianthus (See Sunflower)
Helichrysum (Straw Flower) Fine, everlasting double flowers, fine for display; hardy annuals 2 ft. Mixed colors. 5c.
Heliotrope (Cherry Pie) Half-hardy perennial, flowering the whole season, very fragrant. Can also be trained as a greenhouse climber. Mixed colors. 10c.
Hibiscus (Marshallow) Showy, perennial plant with large beautiful colored flowers; 1 1-2 ft. Mixed colors. 10c.
Hollyhocks One of the most majestic of hardy plants, so well known that it needs no further description.
 In separate colors. 10c.
 Choice single mixed colors. 10c.
 Choice double mixed. 10c.
Honesty (Moonwort Satin Flower) Hardy biennial, with silvery seed pouches, very attractive; 2 ft. 10c.
Humulus (Japanese Hop) Ornamental, fast-growing climber resembling the common hop. 10c
Impatiens (Sultans or Zanzibar Balsam) Charming plant for decorating greenhouse or dinner table, producing bright, waxy looking flowers. Mixed colors. 25c.
Ipomoea Climbers of very rapid growth, beautiful, varied flowers; for covering walls, arbors, stumps, etc.
Coccinea (Star Ipomoea) Small scarlet flowers 5c.
Bona Nox (Evening Glory) Violet, large fragrant flowers, expanding in the evening. 5c.
Rubra Cœrulea (Heavenly Blue) Bright sky blue. 10c.
Grandiflora (Moon Flower) Blooms at night and on dull days, pure white flowers, 5 to 8 inches in diameter, rapid climber, 10c.
Job's Tears (*Coix Lachrymae*)
Kenilworth Ivy (See *Linaria*)
Kochia Tricophylla or **Burning Bush** 10c pkt
Lady Slipper (See *Calceolaria*)
Lantana One of the most desirable half-hardy perennials, constantly in bloom, verbenas-like heads of orange, white, rose and other colors; 2 to 5 ft. Mixed colors 10c.
Imperial Japanese This variety without question the handsomest of all Morning Glories. Sow in good soil as soon as weather permit, a strong vigorous climber, flowers of gigantic size, remain open most of the day. The colorings are beyond description. Choice mixture 10c
Larkspurs (See *Delphinium*) One of the best known garden flowers, hardy annuals
Dwarf Rocket 1 ft. Mixed colors 10c. Dbl. mixed 10c.
Double Stock Flowered Tall branching sort; 2 ft. 5c.
Lathyrus (Everlasting or Hardy Sweet Pea) Free-flowering hardy perennial climber continually in bloom. Mixed colors. 5c pkt.
Lavender (*Lavandula Vera*) Well-known, sweet-scented, hardy perennial; 3 ft. 5c pkt.
Linaria (Kenilworth Ivy) Charming small, hardy perennial, trailing plant. 10c pkt.
Linum (Scarlet Flax) A very showy bedding plant, brilliant scarlet, excellent bloomer, hardy perennial; 1 ft. 5c pkt.
Lobelia (Cardinal Flower) Popular flowering plant for pots, hanging baskets, etc. Bloom profusely from June to November, hardy perennial.
Crystal Palace Rich deep blue. 10c pkt.
Crimson, white or blue 10c pkt. Mixed colors 5c pkt.
Hardy Perennial Lobelias (Cardinal Flower) Brilliant scarlet; 3ft. 10c pkt.
Lophospermum Beautiful climbing plant, trumpet shaped flower, 10 ft. 10c pkt.
Lupinus Ornamental free-flowering annual, various colored, pea-shaped flowers; 2 ft. 5c pkt.
Lychnis Handsome hardy perennial, easy culture, fine for beds and borders. Mixed colors 10c.
Marigold (See *Tagetes* also *Calendula*. French Varieties) An old favorite, free-flowering
Double Yellow 10c pkt.

- Marigold** (Continued)
Single Yellow 10c pkt.
Mixed colors 5c pkt.
African varieties
Double yellow 10c pkt.
Large African Tall, double yellow; 2 ft. 5c pkt.
Signata Pumila A dwarf, compact, bushy annual marigold with beautiful delicate fern-like leaves, densely covered with flowers of bright yellow striped brown; fine border plant. 5c pkt.
Matricaria (Feverfew) Free-flowering, blooms until frost, hardy annual; 18 inches. Dbl white 10c pkt.
Jaurandia Beautiful, slender-growing climber, half-hardy perennial; 10 ft. Mxd colors 10c.
Mesembryanthemum (Ice Plant) Dwarf trailing plant of great beauty, blooming the whole summer, half-hardy annual; 6 inches. 5c pkt.
Alignonette (Reseda) A popular favorite, sown in April and again in July, will keep up a succession of bloom until frost; also suitable for pots, very fragrant, (orange) 5c pkt.
Golden Machet 10c.
Miles Spiral spike; 8 to 10 inches long, very fragrant. 5c.
Improved red 5c.
White Very fragrant. 5c.
Sweet scented Old popular variety, small spikes, very fragrant. 5c.
Mimosa (Sensitive Plant) A curious, interesting annual with pinkish-white flowers, leaves close and droop when touched or shaken. 5c pkt.
Mimulus (Musk Plant) Very showy, profuse-flowering plant, half-hardy perennial, blooms first year if sown early; 1 ft. 5c pkt.
Tigrinus (Monkey Flower) Spotted variety. 5c.
Moschatus (Musk Plant) Fine for hanging baskets, small yellow flowers, fragrant foliage. 5c.
Palustris The true forget-me-not, beautiful blue flower; 6 inches. 10c.
Mirabilis (See Four o'clock) 5c pkt.
Momordica Very curious climber, ornamental foliage, fruit golden yellow, opens when ripe showing the seed and its beautiful carmine interior, fine for rock-work, etc., annual 10 ft. 5c.
Morning Glory (See Convolvulus)
Musa Ensete (Abyssinian Banana) A splendid plant for open ground, producing a most striking effect when planted singly or in groups, thrives best in hot seasons, growing very large. 10 to 20 ft, especially when freely supplied with liquid manure. Seeds germinate easily if started in hot bed; tender perennial. 25c.
Musk Plant (See Mimulus)
Myosotis (Forget-me-not) A pretty, small, double, aster-like flower, half-hardy perennial, blooms first year if sown early, bright blue; 6 inches. 5c.
Nasturtiums (Tropaeolum) For ease of culture, duration of bloom, brilliancy of color and general all around purposes nothing excels this popular variety. Plant in moderately good soil well drained, sunny position, quick growing and bloom profusely until hard frost comes. Tall Climbing Sorts. Crimson 5c, lilac 5c, yellow 5c, white 5c, purple 5c, rose 5c, mixed 5c.
Lobb's Climbing Nasturtiums Scarlet, white, red. 5c each.
Tom Thumb No collection of flowers should be without Nasturtiums, they grow so freely and afford such a variety of rich bright colors. As a cut flower there is nothing more effective sweet-scented and pleasing in every way.
Tall Varieties mixed. 10c oz. 5c pkt.
Dwarf Varieties mixed. 15c oz. 5c pkt.
 Our mixture of Nasturtiums is the finest in the country.
Nasturtium Dwarf Aurora, very fine 5c pkt.
 " Beauty, yellow and scarlet, 5c pkt.
 " Bronze, 5c pkt.
 " Cardinal (Dark scarlet) 5c pkt.
 " Cloth of Gold (Light foliage) 5c pkt.
 " Crystal Palace dwarf, 5c pkt.
 " Empress of India (Dark leaves) 5c pkt.
 " King of Tom Thumb, 5c pkt.
 " King Theodore, very dark, 5c. pkt.
 " Ruby King, 5c. pkt.
 " Flammulm, Grandiflorum, tall. Scarlet and yellow, extra fine, 5c pkt.
Nicotiana (Tobacco Plant) Delightful, sweet-scented, pure white tubular flower, blooming continuously; annual; 2 to 3 ft. 5c pkt.
Nigella (Love in a Mist, or Devil in the Bush) A compact, free-flowering plant with curious looking flowers and seed-pods; of easy culture; hardy annual; blue and white mixed; 1 ft. 5c pkt.
Ornamental Grasses (See Grasses)
Pansies Are so well known that no description is necessary. Sow early and transplant. Our pansies are imported direct from the grower and are equal to the best that are offered. Fine mixture of leading shades and colors 10c.
 Extra choice mixture of best large flowering varieties, 25c.
Giant Trimardeau Pansies
 Fine mixed 10c.
 Cardinal, fine scarlet, very showy 10c.
 King of the Blacks 10c.
 Golden Yellow 10c.
 Emperor William 10c.
 Light Blue 10c.
 Snow Queen 10c.
 Pure Yellow 10c.
Violas or Tufted Pansies While the Pansy Proper is a spring flower, violas flower throughout the entire season. Seeds sown in spring produce flowering plants by June which bloom until frost. Splendid mixed colors, fine varieties. 10c.

Passiflora (Passion Flower) Fine climbing plant for garden or greenhouse with a profusion of attractive flowers; mixed. 10c.

Pentstemon (Beard-Tongue) One of the most beautiful attractive herbaceous plants; bearing long graceful spikes of rich colored flowers; if sown early and transplanted in May will bloom in July until frost, half-hardy perennial; 2 ft. mixed colors 10c

Perilla Foliage a dark purple, annual; 2 ft. 5c pkt.

Petunia For outdoor decoration or house culture few plants equal the Petunia. Commence flowering early and continue a mixture of bloom until killed by frost, easily cultivated, requiring a good soil and sunny position.

Superb double fringed. 50c.

Double Large Flowering fine mixture. 25c.

Single Varieties

Ruffled Giant Very large, in great variety of colors 25c

Fringed Giant, Very fine. 35c.

Snowball Pure white. 10c.

Striped and Blotched Small flowering. 5c.

Fine mixed, all colors. 10c.

Phlox Drummondii Of all summer flowering annuals this variety is unquestionably one of the most brilliant and satisfactory. Seed may be sown in open ground after danger of frost is past and in a few weeks the beds or borders are all aglow with their brilliant coloring until cut down by the frost. For early flowering they should be started indoors.

Phlox Drummondii Mixed colors. 5c pkt.

White 10c, pink 10c, rose 10c, scarlet 10c, red 10c.

Dwarf Phlox This strain of dwarf, compact habit, makes a desirable pot plant, also for ribbon lines and massing; 6 inches high.

Scarlet, white, pink, mixed colors 10c.

Double Phlox Especially fine for cut flowers, lasting better than the single sorts. Sow in light soils. Mixed colors 10c.

Star Phlox (Star of Quedlinburg) Dwarf, pretty star-shaped flower. Mixed colors 10c.

Hardy Perennial Phlox All colors, mixed 10c.

Pinks (See Dianthus)

Poppies An extremely popular brilliant flowering annual. Poppies should be sown where they are to remain, as they will not stand transplanting.

Single Annual Poppies Shirley's selected Strain 10c, scarlet 5c, white 5c.

Blue Poppy 14 inches high, producing many large tulip-shaped scarlet flowers 10c Single mixed 5c.

Oriental Poppy Perennial, exceedingly showy, scarlet with black centre. 10c pkt.

Double Annual Poppies Mixed colors 5c.

Paeony Flowered Large showy, double mixed colors 5c.

Portulaca (Sun Plant) Fine hardy annual, of easy culture, thrives best in rather rich light sandy loam and sunny situation, flowers of richest colors, blooming throughout the summer in great profusion, fine for beds, edging or rockwork; 6 inches. Sgl. mixed 5c. Dbl. mixed 10c.

Primula Charming beautiful Chinese Fringed Primrose, fine for winter or spring decorations. One of the most important winter-blooming pot plants, sow from March to May. White 50c pkt. scarlet 50c pkt. pink 50c pkt. crimson yellow eye 25c pkt. mixed colors 25c pkt. Double white 50c pkt. Double mixed 50c pkt.

Primula (Obconica Grandiflora) On single white, slight tinge of lilac. Everblooming. 10c pkt

Pyrethrum Handsome herbaceous plants of easy culture so much used for bedding edging etc.

Aureum (Golden Feather) Bright yellow foliage, 10c.

Double mixed 25c, single mixed 10c.

Reseda (See Mignonette)

Rhodanthe (Swan River Everlasting) A charming annual; does well in a light rich soil and warm sheltered situation. Fine for pot culture, flowers everlasting. Mixed colors. 5c.

Ricinus (Caster Oil Bean) Ornamental plant of stately growth and picturesque flowers, brilliant colored fruit; fine for lawns or center plants for beds, mixed all colors. 5c.

Philippiensis 10 ft. 5c.

Salpiglossis (Painted Tongue) One of the greatest favorites among annuals. Partly on account of its easy culture, but mostly for its beautiful, almost orchid-like flowers. Mixed sorts 5c pkt.

Salvia (Flowering Sage) A favorite bedding plant, bearing long spikes of flowers in great profusion from July until frost, half-hardy perennial, blooms the first year from seed sown indoors and transplanted when weather permits.

Splendens (Scarlet Sage) Beautiful bright scarlet. 10c pkt.

Patens (Blue Sage) 5c.

Scabiosa (Mourning bride or Sweet Scabious) A very handsome and autumn border plant with great profusion of very double flowers. Splendid for table bouquet; hardy annual; 2 ft. Double mixed. 10c pkt.

Scarlet Runner Beans Great favorite of England and continent of Europe, not only as an ornamental climber, but for the delicious edible beans which succeed the bright scarlet blossoms. 5c pkt.

Schizanthus (Butterfly or fringe flower) Splendid annual with a profusion of various colored flowers; fine for greenhouse decorations and flower garden, of easy culture. Mixed. 5c pkt

Smilax (Myrsiphyllum Asparagoides) In many respects the Smilax is the most useful, and certainly one of the most graceful climbers; for bouquets and floral decorations it is indispensable. Soak seed in warm water for 12 hours and plant in pots. A tender perennial; white; 10 ft. 10c pkt.

Solanum (Jerusalem Cherry) Very useful pot plant for winter decoration, dwarf branching habit, leaves small and oval shaped, bearing in great profusion bright scarlet globular berries 1 ft. 10c pkt.

Snagdragon (See Antirrhinum)

Stocks (Gilliflower) The stock is one of the most popular annuals, either for bedding or pot culture, for brilliancy and diversity of color, fragrance, profusion and duration of bloom it is unsurpassed.

Stocks (Continued)

Large Flowering 10—Weeks Stocks Red 10c, blue 10c, pink 10c, purple 10c white 10c, yellow 10c, mixed colors 10c.

Cut-and-come-again 10-weeks stock Splendid perpetual blooming class. Sow March or April. They begin flowering in June, continuing until frost, and are especially valuable from September to October when other flowers are scarce. They throw out numerous side branches, all bearing fine double flowers. Excellent for cutting. White 10c, rose 15c, red 15c, blue 15c. Fine mixed colors. 10c pkt.

German Stocks Half-hardy biennial, double flowers; 2 ft. Mixed colors. 10c pkt.

Sunflower Remarkable for their stately growth, size and brilliancy, making a very showy effect among shrubbery and for screens. Single sunflowers are indispensable for cutting. Sow in a sunny spot in April or May. They come into bloom early in summer and keep up a constant supply of flowers until cut down by frost. 5c pkt. Single dwarf or miniature sunflowers 10c pkt. Giant Sunflower, 8 ft. 5c pkt.

SWEET PEAS Ebeling's cream of the named Sweet Peas. This is a select list of giant-flowering varieties. We have discarded all small-flowering sorts and duplicates under different names.

America Crimson scarlet, striped on white, large size. 5c pkt. 10c oz.

Blanche Ferry Extra early. The popular pink and white. Comes into flower ten days earlier than others. 5c pkt. 10c oz.

Dainty Pure white edged with pink on the standards and wings. 5c pkt. 10c oz.

Dorothy Eckford The grandest, pure white; very large, producing enormous mass of blooms. 5c pkt. 10c oz.

Gorgeous Brilliant orange salmon. 5c pkt. 15c oz.

King Edward VII Bright red, giant flowering, very fine, strong stems. 5c pkt. 10c oz.

Lady Grisel Hamilton The finest pale lavender. 5c pkt. 10c oz.

Lettie Eckford White shaded lilac, white shaded, and edged lavender blue. 5c pkt. 10c oz.

Lovely Warm rose, pink, large and extra fine. 5c pkt. 10c oz.

Navy Blue Deep indigo blue, medium size. 5c pkt. 10c oz.

Othello Deep maroon, very dark maroon, fine form and large size. 5c pkt. 10c oz.

Prima Donna Soft pink; a magnificent rich, pure pink; very fine. 5c pkt. 10c oz.

Prince of Wales The finest bright rose. 5c pkt. 10c oz.

Queen Alexandra Beautiful Scarlet, Very Brilliant, Handsome and desirable, 5c pkt. 10c oz.

Mrs. Eckford Light primrose, large size, semi-hooded form, of the best type. 5c pkt. 10c oz.

Sadie Burpee Pure white, large size, very fine. 5c pkt. 10c oz.

Double Flowering Sweet Peas Finest mixed colors. 5c pkt. 10c oz.

Sweet Peas Mixed Price, 5c pkt: 10c oz; 20c 1-4 lb; 60c lb. Our mixture of sweet peas are mixed under our personal supervision and contain all of the very best named sorts known to the trade, and we confidently offer them to most careful and critical buyers. A finer mixture cannot be found.

Spencer Orchid-Flowered Sweet Peas. The introduction of this type has created new interest and added to the popularity of Sweet Peas. They are quite distinct from the Standard sorts, having large, round, open flowers, extraordinary size, measuring two inches across wavy standards, wide spreading wings, a very large percentage bearing four immense blossoms to the stem, which is long and strong, making them of exceptional value for cutting. All have been thoroughly tested and are just as easy to grow as the standard varieties. 10c pkt. 20c oz.

Sweet Rocket (Hesperis) Old-fashioned garden plant, also known as Dame's Rocket and Dame's Violet; 2 to 3 ft. high, with spikes of showy white, lilac and purple fragrant flowers; fine for shrubbery and permanent border; mixed colors. 5c pkt.

Sweet Sultan See Centaurea.

Sweet William (London Tufts) A well-known attractive free-flowering hardy perennial, fine for beds and shrubbery; 1 1-2 ft. Sgl. mixed 5c. Double mixed 5c pkt.

Tagetes (See Marigolds and Calendula)

Signata Pumila A dwarf, compact, bushy, annual marigold with beautiful delicate fern-like leaves, densely covered with flowers of bright yellow striped brown; fine border plant 5c pkt.

Thunbergia (Black-eyed Susan) Beautiful rapid-growing climber used especially for hanging baskets, low fences, etc., flowers in buff, white orange, etc., with dark eyes; mixed colors 5c pkt.

Torenia Fine annual; splendid plant for vases, hanging baskets, borders etc., blooming the entire season. Blue, white, and yellow. 10c pkt.

Tritoma (Red Hot Poker Plant) Readily grown from seed. Will bloom first year if sown early. Tritomas are becoming very popular for bedding plants and cut flowers; hardy perennial; 4 ft. Vary in color from light and deep orange, salmon and carmine. 10c pkt.

Tropeolum (See Nasturtium)

Verbenas One of the most popular and free-blooming varieties and so well known that a description of this variety is unnecessary. Half-hardy perennial; easy of culture; sow early and transplant when weather permits. Fine for beds, baskets, rockeries, etc. Scarlet 10c, variegated 10c, white 10c, mixed colors 10c.

Viola (See Pansies)

Vinca (Madagascar Periwinkle or old Maid) Ornamental free-blooming plant, fine for bedding flower from seed the first season continuing until frost, or they may be potted and kept in bloom through the winter, 2 ft. Rose 10c, white 10c, mixed 5c.

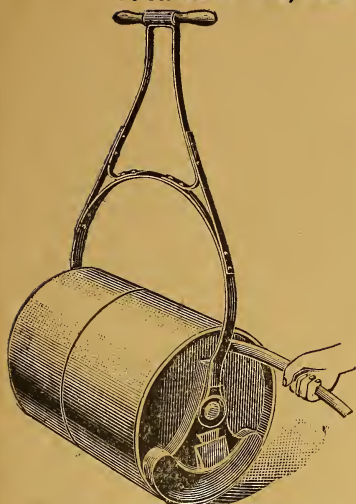
Wall Flower (See Cheiranthus) Half-hardy perennial, 1 1-2 ft high. Mixed 5c pkt.

Wild Cucumber (See Echinocystis.) 5c pkt.

Wall Flower Garden 5c pkt.

Zinnias (Youth and Old Age) One of the most brilliant and showy of annuals. An old and continued favorite. The seed can be sown early and transplanted or sown later in open ground. They come into bloom early in summer, and continue until hard frost.

Dwarf double white, orange scarlet, rose, etc. 5c. Tall double mixed 5c. Dwarf single mixed 5c.



Dunham Lawn Rollers ROLLER BEARING

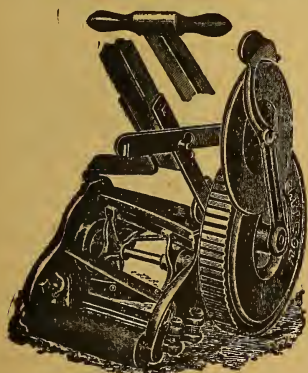
Are infinitely superior to other rollers. In efficiency, being 44 per cent. lighter running than any other roller on the market by actual tests. With a Dunham a boy can do the work that requires a man's strength with other rollers of the same weight.

200 lbs. \$11; 250 lbs. \$12; 300 lbs. \$14

Water-weight Roller

The Dunham Ball-bearing Water-weight Roller is made in one section and electric-welded, no rivets being used so the water cannot possibly leak out. The weight of this roller can be increased or diminished by increasing or decreasing the water. Very simple and easy to handle and revolutionizes the work of rolling. When not in use the water can be let out if desired. Prices \$12.00 to \$16.00

Capital Lawn Trimmer

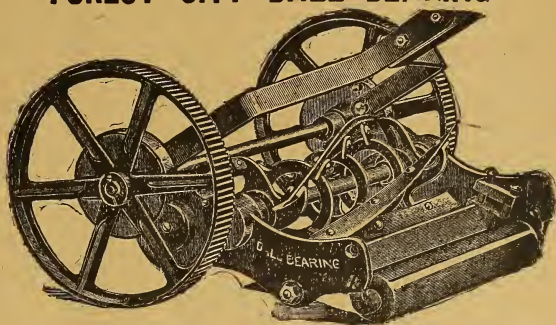


For trimming around walks, flower beds, trees, posts, monuments and shrubbery, and all places that cannot be reached with any lawn mower. Cuts within one fourth of an inch of the edge.

Has a revolving cutter with four crucible steel blades, tempered in oil and cuts six inches wide.

PRICE \$6.00

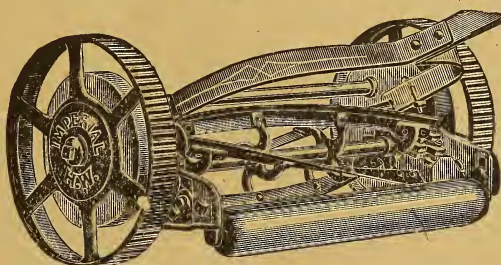
FOREST CITY BALL BEARING



This unquestionably is the Best BALL BEARING MOWER on the market. Perfect in detail, absolutely guaranteed.

15 inch	-	-	\$12.00	19 inch	-	-	\$14.00
17 "	-	-	13.00	21 "	-	-	15.00

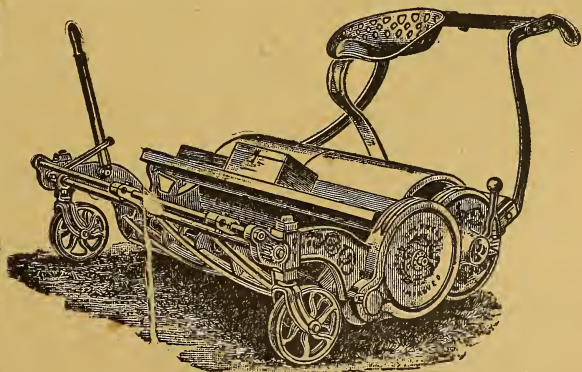
HIGH WHEEL IMPERIAL



Absolutely Warranted for Two Years. Positive Adjustment. Has no Equal. In Public Parks, Private Lawns and Cemeteries everywhere. Ask for Special Catalogue.

16 inch	-	\$10.00	20 "	-	13.00
18 "	-	11.00	22 "	-	14.00

IMPERIAL HORSE LAWN MOWER



PRICE, \$60.00 AND UP.

Absolutely Guaranteed to Cut Clean in turning around. Send for Catalogue.

SPRING PLANTS, BULBS AND ROOTS.

PER DOZ.			EACH DOZ.			EACH DOZ.		
Cauliflower Plants	25 cts		Salvia	.10	1.00 "	For-get-me-not	.10	1.00 "
Cabbage	10-25 "		Alyssum	10	1.00 "	Dracaena	.10	1.00 "
Tomato	25 "		Aster		.85 "	Petunia		.50 "
Egg Plant	50 "		Vincas	.15	1.75 "	Pansy		.40 "
Pepper	25 "		Verbenas	.05	50 "	Beautiful Japanese Fern		
Kohlrabi	"		Geraniums	.10	1.00 "	Balls each	50 "	
Root Celery Plants	"		Assorted Plants	.10	1.00 "	Porch hanging baskets		\$1.25
Sweet Marjoram	"		Oannas	.10	1.00 "	to \$2.00		
Sage Plants	"		Snap Dragon	.08	1.00 "	Moss for hanging	.15	per lb.
Summer Savory	"		Ten-Weeks Stock	.10	1.00 "			
Thyme	"		Double Lobelia	12-1-2	1.25			

Calladiums, Gladiolas, Dahlias, Tube-Roses, Tuberous Begonias, Maderia Vines, Peonies, Gloxinias.

GALVANIZED WINDOW BOXES

No.	Height	Width	Length	Water Capacity	Price	No.	Height	Width	Length	Water Capacity	Price
0	6-in.	6	16-in.	1 qt.	\$1.50	6	8-in.	9½	33-in.	5 qt.	3.00
1	8-in.	9½	23-in.	2½ qt.	1.75	7	8-in.	9½	35-in.	5½ qt.	3.25
2	8-in.	9½	25-in.	3 qt.	2.00	8	8-in.	9½	37-in.	6 qt.	3.50
3	8-in.	9½	27-in.	3½ qt.	2.25	9	8-in.	9½	39-in.	6½ qt.	3.75
4	8-in.	9½	29-in.	4 qt.	2.50	10	8-in.	9½	41-in.	7 qt.	4.00
5	8-in.	9½	31-in.	4½ qt.	2.75						

FLORISTS' SUNDRIES

Self Registering Thermometers	Hanging baskets
Tin Foil	Flower Supports
Green Moss	Plant Stands
Florist Letters	Trellises
Bambs and Reed	Shears
Immortelles	Scissors
Mastica	Fine Cutlery
Plant Lables	Syringes for Plants
Fumigators	Flower Pot Brackets
Bulb Syringes	Sharpening of Shears, etc.
Glazing Points	Lawn Seed and Fertilizers
Flower Pots	Bird Supplies
Hyacinth Glasses	Wire Plant Supports
Silkaline, per spool, 30 cents	

STRAWBERRY PLANTS

We are pleased to announce that we can furnish choice thrifty STRAWBERRY and RASPBERRY Plants of all the leading varieties and recommend them to our customers.

Strawberry Plants 75c per 100; Raspberry Plants \$1.50 per 100. Leave orders early.

BERRY BASKETS.

Under the new law all Berry Baskets must be made up to the standard size. We offer Berry Baskets of correct size and shape and well made. Prices right. Our Baskets fit the Crate perfectly. We can save you money on berry baskets if you place orders early. Call and see us before buying.

GRAPE BASKETS

We carry a large stock of Grape Baskets at the lowest market price.

FLOWER TUBS, ALL SIZES

\$1.00 \$1.50 \$2.00 \$2.50 \$3.00 \$4.00



Flower Pots

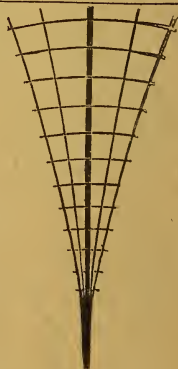
Hanging Baskets

Fern Pans

Lily Pans

TRELLISES, URNS, VASES, SETTEES.

We offer a fine variety of styles in various sizes suitable for lawns front, yards, cemeteries, parks etc. These can be furnished to order on short notice, at reasonable prices. For full particulars, write or call and see us.



MASTICA FOR GLAZING GREENHOUSES, SASHES,

Etc., new and old. It is elastic, adhesive and easily applied. It is not affected by dampness, heat or cold.

Every green house man has experienced difficulty in using putty for glazing, that is satisfactory for any length of time. Putty is not adapted for greenhouse work. "Mastica," when applied, in a few hours forms a skin or film on the entire mass, hermetically sealing the substance, and preventing the evaporation of the liquids, and remains in a soft, pliable and elastic condition for years. "Mastica" is of great value in going over old houses with a putty bulb or machine on the outside of sash, as it makes it perfectly tight and saves the expense of re-glazing the glass.

The use of "Mastica" avoids the necessity of repeatedly reglazing the houses, saving much time and expense. With "Mastica" you can bed in or use outside with machine.

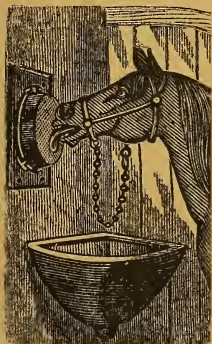
Broken glass can be easily removed and replaced by new without the breakage of other glass, which usually occurs with hard putty. One gallon will cover about 290 running feet (one side.)

Price of Mastica $\frac{1}{2}$ gal. 80c., gal. \$1.50.



MASTICA
GLAZING
MACHINE.

PRICE \$1.50.



Roto Salt Cakes and Frames

For Horses, Cattle and Sheep. Pure Refined Salt. Acts as a tonic; invigorates the system; promotes digestion; purifies the blood. Makes healthy and vigorous animals.

25C. CAKE

Five Cakes for One Dollar
per dozen Two Dollars

Frames, - - - - - 25 Cents

Climax Handy Weeder

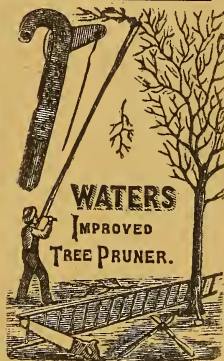


The greatest "little" device ever invented.

Nothing like it.

Thousands in use.

PRICE, 75 CENTS



Waters Tree Pruner
75c to \$3.00



OUR F. G. F. PRUNING SAW.

This is a very practical Pruning Saw, and is recommended by the Nurseries and Horticultural Societies everywhere. It is a self-feeding draw cut blade with a thin back that will not pinch or bind; may be attached to a pole, permitting very rapid work. It will do three times the work of hand saws or shear trimmers. It has no equal for cutting out suckers and for trimming the outside and tops of trees so difficult to reach. No stubs are left. It covers all the features required for an up-to-date labor-saving tool.

Price \$2.50.

IRON AGE GARDEN SEED DRILLS AND WHEEL HOES

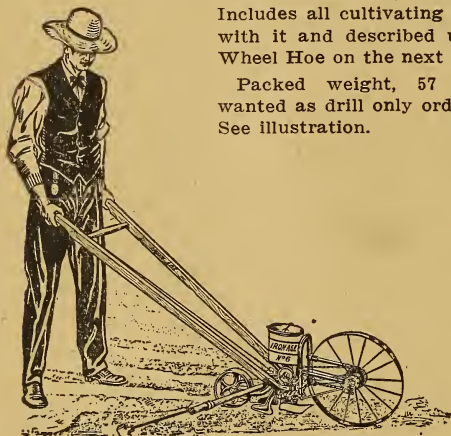
For the home garden, the farm garden, market garden, seedmen, florists, poultrymen, etc. There are 38 or more styles and combinations in this line, all described in a booklet, "Gardening with Modern Tools," and which we would like to send each reader of this catalog.

No. 6
Combined
\$15.00



No. 6 Combined Hill and Drill Seeder, Double and Single Wheel Hoe. Sows accurately any small garden or flower seed, in continuous rows or in hills, 4 to 24 inches apart, opens its own furrow, covers the seed and rolls it, and marks the next row. Sows where you can see it drop. Adjustable index permits you to sow as thick as your experience tells you is right. The shut-off is connected at the handles, at your finger ends. Includes all cultivating tools shown with it and described under No. 1 Wheel Hoe on the next page.

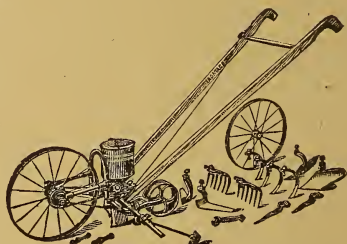
Packed weight, 57 pounds. If wanted as drill only order as No. 7. See illustration.



No. 7 Hill and Drill Seeder, \$11.25

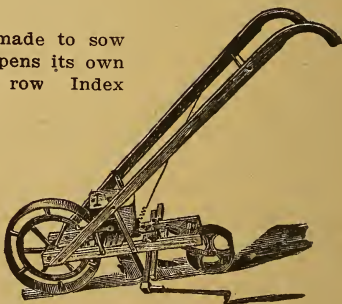
NEW MODEL SEED DRILL. Is strongly built and made to sow accurately in continuous rows, any thickness wanted. Opens its own furrow, covers the seed and rolls it. Also marks the next row. Index helps you to set right for sowing. Flow of seed can be cut off instantly. Adjustable marker. Capacity two quarts. Sows all kinds of seed.

Ask for
special IRON AGE booklets
giving full descriptions.



No. 4 Combined, \$13.75

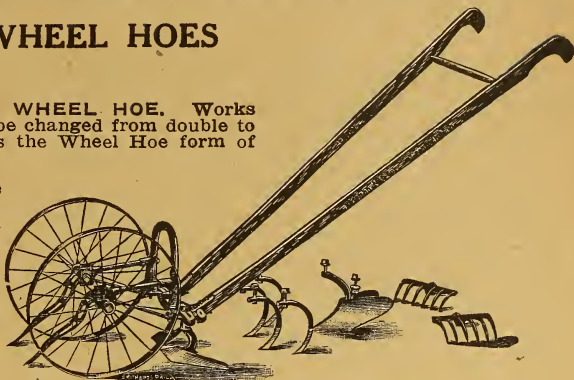
No. 4 Combined Drill Seeder, Double and Single Wheel Hoe is same as No. 6 except that it is arranged to sow only in continuous rows and it has a different opening plow. If wanted as a drill only order as No. 5, Price \$10.00. Is also furnished as drill with side hoes and cultivating teeth, No. 40, Price \$12.00.



New Model Seed Drill, \$9.00

IRON AGE WHEEL HOES

NO. 1 DOUBLE AND SINGLE WHEEL HOE. Works astride or between the rows. Can be changed from double to single wheel in 3 minutes. This is the Wheel Hoe form of No. 6, and will take seeder attachment any time. Price of attachment, \$5.50. The tools include pair each side hoes, plows and rakes, also four steel cultivator teeth, all adjustable on the frame to suit width rows and character of work you are doing. You can open or cover fur-



No. 1 Double and Single Wheel Hoe, \$8.75

rows, ridge growing crops, cultivate, hoe close to plants without danger to them, pulverize and level the soil, and so forth. Steel tube frame, 16-inch steel wheel, bicycle style. Adjustable handles. Is pushed ahead a step at a time in a natural way. Is sold complete as No. 1 or as No. 3 with side hoes only. Takes Disc Cultivating Attachment, Fig. 369, Landside Plow Attachment, Fig. 82, and many others.

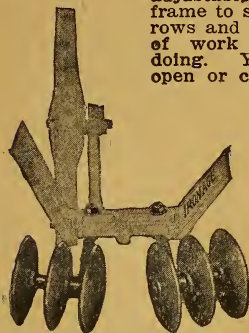
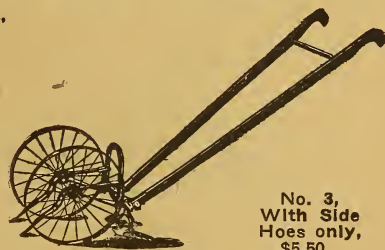


Fig. 369,
Disc Cultivating
Attachment,
\$2.50



No. 3,
With Side
Hoes only,
\$5.50



No. 19-C
\$4.50
Complete with
all tools

No. 19-C Wheel Cultivator and Plow
Has extra high steel wheel—24 inches—which some sections seem to prefer. The frame is an all steel arch in three parts—compact, light, durable. The working tools are attached in position easily and are adjustable. The plow is noted for turning a fine good furrow.

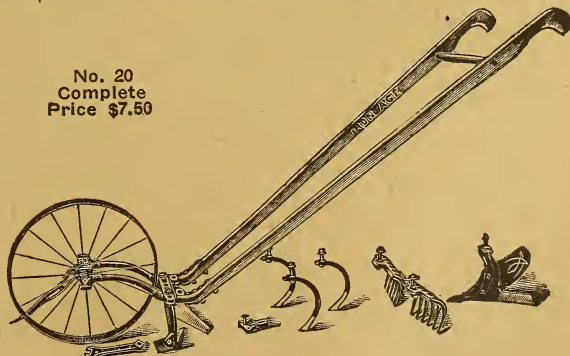
The cultivating tools include Landside Plow, Scuffle Hoe, two separate Cultivator Teeth, Set of Cultivator Teeth on bracket.

NO. 20 SINGLE WHEEL HOE, CULTIVATOR, ETC. Will do practically same work as No. 1 except that it is meant to go between rows only. Seed attachment can be used on it if wanted. If wanted with side hoes only, order as No. 21, Price \$4.50.



No. 20
Complete
Price \$7.50

Fig. 82,
Landside Plow Attachm't,
\$1.15

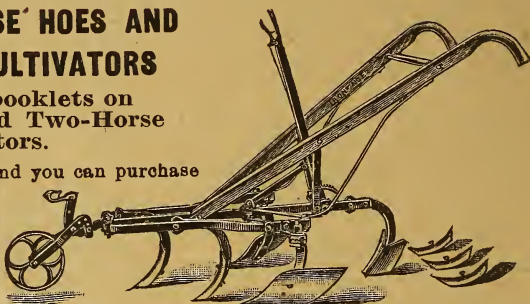


Ask for Iron Age Booklet,
"GARDENING WITH MODERN
TOOLS."

IRON AGE HORSE HOES AND CULTIVATORS

Ask for complete new booklets on Horse Hoes, Harrows and Two-Horse Walking Cultivators.

These tools are all made standard and you can purchase them in their simplest forms and build up to whatever your ground or crops need--with or without lever expander, with lever or plain wheel or without either, etc. Long, high steel frames, make them run steady and clear of trash.



No. 600 EP \$8.00.

With lever expander and plain wheel.

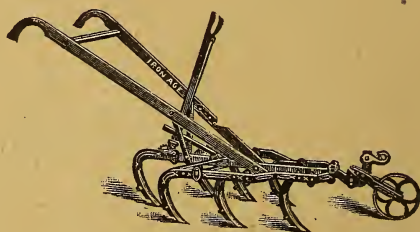
No. 600-EP Horse Hoe and Cultivator has a range of cultivation from 14 inches to 30. The hoe standards are solid steel, attached to the frame bars with malleable ratchet castings that give adjustments to the hoes at any angle.



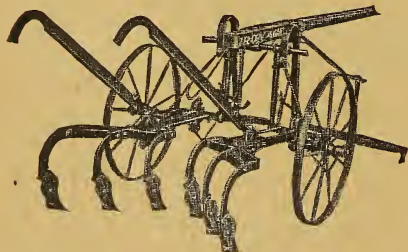
No. 1014 EP \$6.90.

No. 1014-EP Harrow and Cultivator carries 14 diamond shaped steel teeth with a small cultivator point forged on one end. It is adjustable for many kinds of crops and may be used as a Harrow or Cultivator. Opens to 34 inches and closes to 11.

No. 1007-EP Seven Tooth Cultivator. Especially adapted for first workings or in level cultivation. The teeth are narrow and cut deep, throwing small furrows that do not harm the young plants. Thorough cultivation in all soils. Opens to 24 inches and closes to 10.



No. 1007 EP \$7.15.



No. 976. \$26.00.

Two-Horse Walking Cultivators.

These are balance frame machines that are often used on steep hillsides or in very rough ground.

The gangs shift in parallel lines, the points always face one way and the handles are adjustable to permit the operator to work astride the row or at one side. The wheels are steel and adjustable on the arch from 36 to 48 inch rows. Built with 6 or 8 break pin or spring hoes or with spring teeth.

ASK FOR **IRON AGE** BOOKLETS

IRON AGE FERTILIZER DISTRIBUTORS

These are for use in gardens or on truck farms. NO. 22 sows the fertilizer and seed at same operation. Opens two separate furrows for fertilizer and covers with soil before opening furrow for the seed. Covers the seed, rolls it and marks the next row. Distributes fertilizer thoroughly and sows the seed with practically the same seeding attachment as on No. 6 Combined. No. 22 can be used for side dressing and includes pair of extra wheels to travel astride the plants.

Fig. 184,
Fertilizer
Distributor
Attachment,
\$5.75



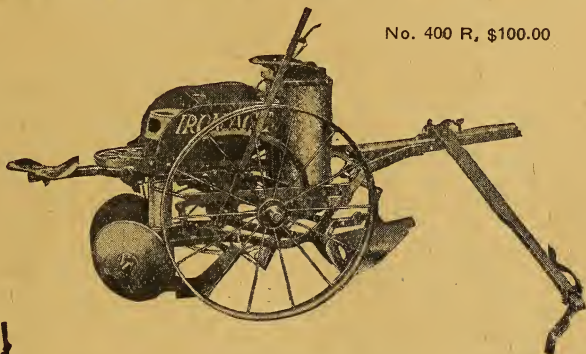
No. 22 Combined Fertilizer Distributor, Hill and Drill Seeder, \$22.50

FIG. 184 shows a fertilizer attachment that can be used on No. 1 or No. 20 Wheel Hoes. Sows across bottom of the furrow or on either side, so it will not come in contact with the soil. Can also be used for side dressing a growing crop.

IRON AGE POTATO PLANTER

Plants one seed piece in every space and one only. Makes a perfect stand possible and saves at least one bushel of seed per acre. Straight rows, even depth and uniform spacing. Can plant 9 to 24 inches apart. Furnished with or without fertilizer distributor, regular or large size. Also, with seed box extension if wanted. Steel seed box. Steel frame. Choice of four styles of opening

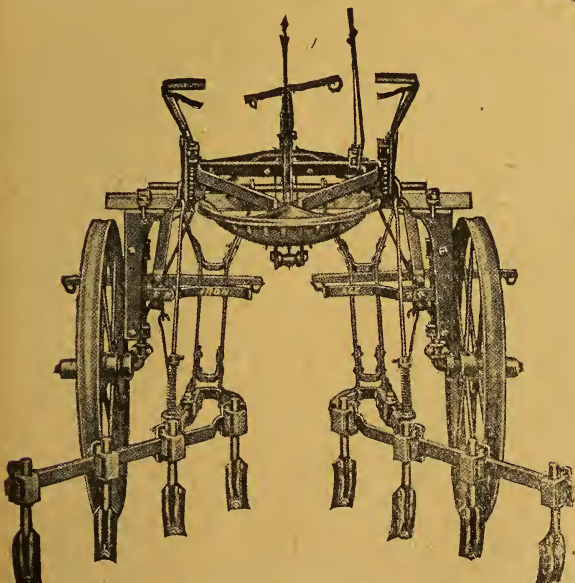
No. 400 R, \$100.00



plows. The boy on the back seat pays, for it costs no more to prepare ground, cultivate, fertilize and spray a perfect stand, and every hill missed decreases your yield.

IRON AGE RIDING CULTIVATORS

All steel frame. Pivot wheels with ball bearings, hinged gangs, steel whiffletrees, double end, reinforced cultivator points, parallel shift so points always face the way you set them, adjustment of points for depth and angle—these make this line of cultivators thorough and accurate, easy to guide, safe in adjustments and they wear well. Furnished with break pin or spring hoes or with spring teeth.



No. 78—All Steel Pivot-Wheel Riding Cultivator. Price \$40
No. 76—6-hoe plain, \$38.50

Ask for Special Iron Age Booklets on each line.

IRON AGE SPRAYERS

For Every Purpose

There are more than 70 combinations suitable for all kinds of spraying, and most of them can be built up on the unit plan so that you can buy what you need now and the balance as you require it.

No. 192 Bucket Pump

is made of brass and so put together that anyone can quickly get at any part for cleaning or repairs. Bronze ball valves, candlewick packing, pressed brass nozzle.

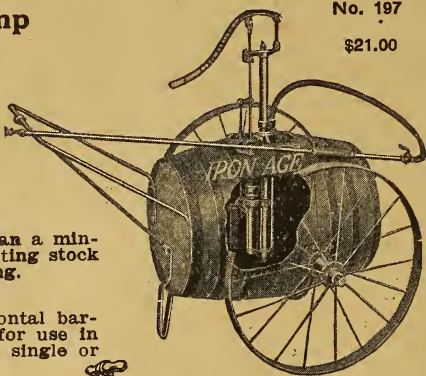
No. 197

\$21.00



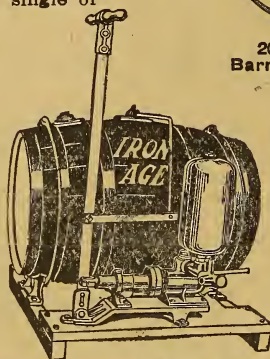
No. 192
Bucket Pump
\$7.50

No. 197 is same pump mounted in 20-gallon barrel, on steel wheels, with four feet of steel pipe. Pump is detachable in less than a minute. A good outfit for disinfecting stock buildings or any other spraying.



20 Gallon
Barrel Sprayer

No. 190 is 50-gallon horizontal barrel rig, mounted for use in any wagon, cart, etc. Pump, single or double acting. Can be built into a 50-gallon power rig or combination hand and power outfit. Automatic mixing of solutions.



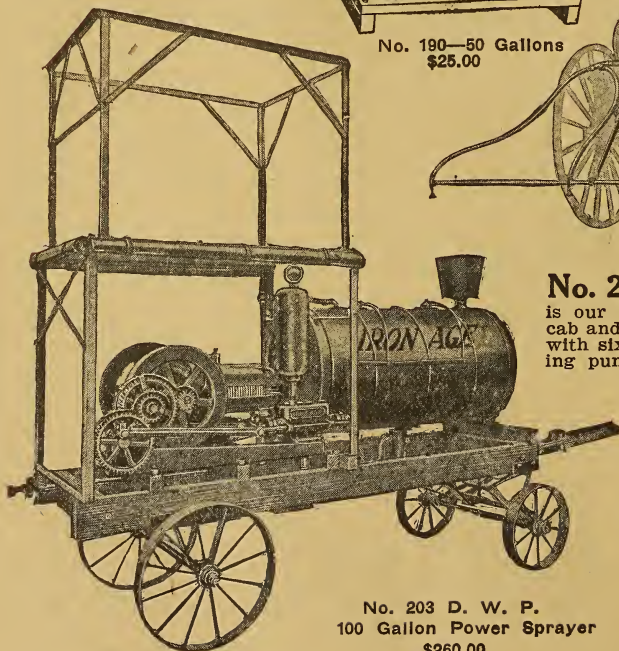
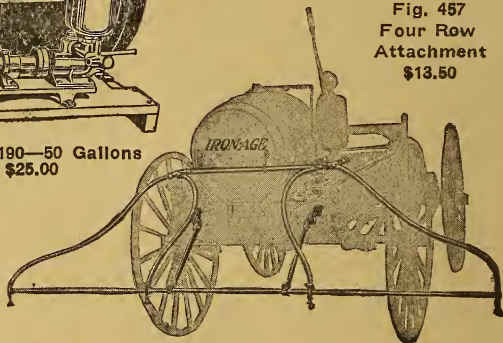
No. 190—50 Gallons
\$25.00

Use in Any Wagon.

Outside Pumps.
Bronze Ball Valves.
Hemp Packing
Easy to Get.

Fig. 457 shows 4-row attachment for use with No. 190 at back of a wagon, in row crops. Intended for small acreage.

Fig. 457
Four Row
Attachment
\$13.50



No. 203 D. W. P.

is our 100 gallon power sprayer with cab and guard rail, 200 pounds pressure with six to eight nozzles. Double acting pump, air-cooled 2 H. P. engine, automatic mixing of solutions with circular agitator, special sediment chamber, strong truck. Direct connection between engine and pump-cut gears. Steel tower and tank filler supplied if wanted.

Line also includes 150 and 250 gallon Power Sprayers.

No. 203 D. W. P.
100 Gallon Power Sprayer
\$260.00

Ask for "Spray" booklet and spray calendar telling "When, How and What to Spray With."

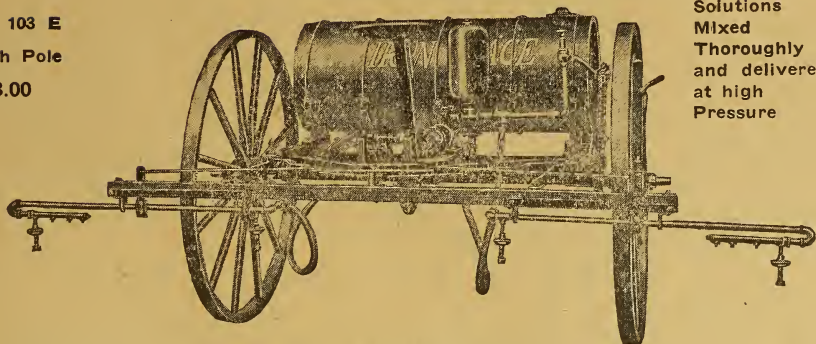
TRACTION SPRAYERS

For Potatoes and other row crops

No. 103 E

With Pole

\$103.00



Solutions
Mixed
Thoroughly
and delivered
at high
Pressure

For potatoes and other row crops. Made in 4 or 6 rows, with 50 or 100 gallon wood tanks, wood wheels, single or double acting pumps, thorough mixing of solutions, large air chamber, bronze ball valves, hemp packing—all easily gotten at, relief valve to regulate the pressure, center drive by chain, pressed brass nozzles and nozzle strainers with every outfit, also wind shift. Spraying not only insures your crop against blight, which no amount of spraying can cure, and kills the bugs in a hurry, but every spraying actually improves the healthy condition of your plants and so increases the yield per acre. Takes an orchard attachment at a moderate price—entirely practical in small orchard.



Alfalfa—
Inoculated with
“Nitragin”



Alfalfa—
Not
Inoculated

The Improved German Soil Inoculator, Nobb-Hiltner Process

NITRAGIN

TRADE MARK REG'D DEC. 8, 1898 NO. 32212

PURE CULTURE

THE SIMPLEST SAFEST AND SUREST SYSTEM
OF SOIL INOCULATION FOR ALL LEGUMES



“NITRAGIN” is the trade-mark name for the special germ, or bacteria, that acts on the legume root, draws nitrogen from the air and converts it into plant food. As a result there is a uniform “catch”; the crop grows quickly; it is strong, hardy and healthy—deep-rooted—rich in food-value. Meanwhile your soil is growing *richer* instead of *poorer*—your land *more valuable*.

Failure with legumes is usually due to lack of bacteria. In “NITRAGIN” Pure Culture we send you *billions* of these necessary nitrogen-gathering germs, packed in proper food to keep them alive, active and healthy.

It's *easy* to treat your seed with “NITRAGIN” Pure Culture. A boy can do it in ten minutes.

If your past experience with legume crops has been unsatisfactory it was probably because your soil lacked these vital, strengthening germs. Some soils have only a partial supply; in other soils the germ is missing or so sickly as to be worthless. Such soils need “NITRAGIN” Pure Culture to supply an abundance of *pure*, healthy, strong, virile bacteria. This means a profitable crop and new life to the soil.

If you have been successful in growing legumes you can have *greater* success by using “NITRAGIN” Pure Culture.

A green manure crop inoculated with “NITRAGIN” Pure Culture provides a *richer* humus in *far greater* volume than does a non-inoculated legume.

Get the Original

Look for the Armour Oval Label

This is the *original* Pure Culture—discovered by Nobb and Hiltner, famous German bacteriologists. It has been perfected by twenty years of scientific testing, in the laboratory and on the farm. The germs come to you packed in a *granular* food—in a ventilated can—the *safe* and *satisfactory* way.

Prices per can: Garden size, \$1.00; acre size, \$2.00; 5-acre size, \$9.00. F. O. B. Syracuse. Express Extra. Parcel Post, 10c per acre extra.

The Two Greatest Insecticides

SIMPLE, EFFECTIVE, ECONOMICAL

LIME AND SULPHUR—PYROX

BOWKER'S LIME AND SULPHUR

Every spring when the buds are swelling, but before they show green at the tips, all your fruit trees, vines and shrubs of every kind should be sprayed with our Bowker's Lime-Sulphur. Applications made later than this may burn the foliage and cause serious injury. Therefore you should order early and be prepared for the season.

SPRAYING WITH LIME-SULPHUR IS CHEAP INSURANCE

It's better than most insurance because every time you spray you reap a benefit, whether you have San Jose Scale present or not. It kills all forms of scales and bark lice which are always present, the leaf blister mite, the eggs of many insects and the fungus spores which are lodged on the bark. It checks the growth of mosses and lichens and cleans up the trunk and the large branches.

Lime-Sulphur is not a poison and kills only by coming directly in contact with the insect. It does not kill leaf-eating insects. Spray for these with our Pyrox.

Our Lime-Sulphur has fungicidal properties and is invaluable for use on peaches, plums and all stone fruits.

It's in concentrated solution, always ready for Fall, Winter and Spring use. You simply add spring water and then spray.

ANALYSIS—Gravity (Béaune) 32 to 35; Calcium Polysulphides and Finosulphate 27.50 to 38.50.

1 gal. 65c.; 5 gal. \$2.00; 10 gal. \$3.50; barrels at 16 cts. per gal.

BOWKER'S PYROX—KILLS AND CURES



Pyrox sticks like paint; kills all leaf-eating insects, and prevents disease on potatoes, fruit trees, shade trees, and small fruits and vegetables. It serves the purpose for which two mixtures were previously used, and has done so for over ten years. Pyrox is no experiment; it was introduced in 1898.

It combines non-burning Arsenate of Lead with non-burning Bordeaux Mixture—both thoroughly tried-out remedies—in the shape of a dense, heavy, creamy paste that looks like paint is easily mixed with cold water, and sticks like paint to the foliage. It won't wash off.

Bowker's Pyrox is something more than a combination of Arsenate of Lead and Bordeaux. It is a mixture with reliability and brains behind it; a mixture with laboratory and field experience to support it; a mixture made by careful methods in a modern plant under expert supervision. Such a combination costs more to make and is worth more to buy because of the insurance the name affords against haphazard preparations. Paris Green and Bordeaux applied together or separately never adheres through heavy rains like Pyrox. Frequently our customers send us sample leaves from trees sprayed in May or June that show plenty of Pyrox adhering in October.

It Won't Wash Off. If it were not for the new growth coming along, as is usually the case with shade trees, fruit trees, shrubs, potato vines etc., and which of course must be protected, one spraying would be enough for the season. **1 lb. 30c.; 5 lbs. \$1.00; 10 lbs. \$1.75; 25 lbs. \$4; 50 lbs. \$7.50; 100 lbs. \$13.50; 300 lbs. \$38.**

INSECTICIDES

- | | |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Arsenate of Lead, 1 lb. 25c; 5 lbs. \$1.00;
10 lbs. \$2.00; 25 lbs. \$3.75; 50 lbs. \$7.00. | Nico-Fume, liquid, ¼ lb. 50c; 1 lb. \$1.50;
4 lbs. \$5.50; 8 lbs. \$10.00. |
| Aphis Punk, per doz. \$6.00; pkt. 60c. | Nico-Fume for spraying and vaporizing,
pt. cans, \$2; ½ gal., \$7; 1 gal., \$13.50. |
| Black Leaf 40, price 25c, 75c, \$2.50. | Nico-Fume Tobacco Paper for fumigating,
24 sheets, \$1.00; 144, \$4.50; 288, \$8.50. |
| Black Stuff, Tobacco Powder, per lb. 10c. | Nicoticide, ½ pt., \$1.25; pint, \$2.50. |
| Bordeaux Mixture, dry, per lb. 35c. | Paris Green, 50c. |
| Bordeaux Mixture, liquid, qt. 50c; gal.
\$1.50. | Persian Insect Powder, per lb. 75c. |
| Bug Death, 1 lb. 20c; 3 lbs. 40c; 5 lbs. 65c;
12½ lbs. \$1.25; 100 lbs. \$9.50. | Pyrox, 1 lb. 30c; 5 lbs. \$1.25; 10 lbs. \$2.00;
25 lbs. \$5.00; 50 lbs. \$8.50. |
| Carbolinium, 1 or 2 gals. \$1.35 per gal.; 3
gals. \$1.25 gal.; 5 or 10 gals. \$1.15 gal. | Slug Shot, 1 lb. carton 15c; 5 lb., 30c. |
| Cooper's Sheep Dip, pkg. 50c, \$2.00. | Sulpho Tobacco Soap, 10c and 20c. |
| Eureka Fumigator, \$1.25. | Tobacco Dust, lb., 10c. |
| Eureka Weed Killer, per can, \$1.25. | Tobacco Soap, per pkg., 25c and 50c. |
| Fir Tree Oil Soap, per pkg. 30c. | Tobacco Stems, lb. 5c; per bale, \$2.50. |
| Fir Tree Oil, ½ pint, 75c; pint, \$1.00. | Weedicide, per gallon, \$1.50. |
| Hellebore, per lb. 50c. | Whale Oil Soap, 10c, 15c, 25c. |
| Kerosene Emulsion, 45c, \$1.25. | Whale Oil Soap in bulk, per lb. 8c. |
| Lambert's Death-to-Lice, 10c, 25c, 50c, \$1. | Whale Oil Soap and Tobacco, 1 lb. 20c;
5 lbs. 75c. |
| London Purple, per lb. 60c. | |

Jumbo Powder Gun, 35c.

The prices on this page subject to change without notice.

SLUG SHOT

It is a light, composite, impalpably fine powder, easily distributed by Duster, Bellows, or in water by spraying. It is thoroughly reliable in killing Currant Worms, Potato Bugs, Cabbages Worms, Lice, Slugs, Sow Bugs, etc., and is also strongly impregnated with fungicides.

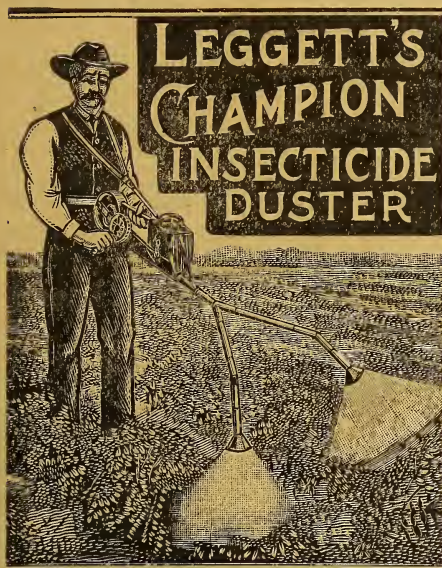


CARBOLINIUM

Insecticide and Wood Preserver

1 gallon.....	\$1.35
5 gallons (per gal.).....	1.25
10 gallons (per gal.).....	1.15

Special prices for larger quantities.



A wonderful invention. Light, swift, safe, strong and cheap. Dusts the pure green. Kills all the bugs and pests without injuring the vines or foliage. Less green used and better results obtained.

The Champion, \$10.00; Little Giant, \$7.50

Remedy for Cut Worms on Cabbages and Tomatoes

Soak bran with Paris green and scatter same in the rows. This will destroy this troublesome pest.

SULPHO-TOBACCO SOAP



Quickly exterminates all insect life on plants or flowers in and out of doors. Unsurpassed for rose bushes. For a cheap, effective, clean and harmless insecticide this is unexcelled. It also acts as a valuable fertilizer reviving plant life. For domestic purposes it rids the house of cockroaches, and is a superior wash for dogs and all animals. Prevents poultry lice. You cannot afford to be without this popular and well known insecticide, if you desire to be successful in plant culture. A trial will give highly gratifying results.

3-oz. Cake, sufficient for 1½ gallons prepared solution, 15c; mailed postpaid 18c.

8-oz. Cake, sufficient for 4 gallons prepared solution, 25c; mailed postpaid 30c.

With every order we enclose free a booklet "The Window Garden," giving valuable information of Plants, and exterminating of Insects.

BUG DEATH



Put March 10 and Nov 9, 1899.

This Insecticide and Plant Food combined has been on the market for ten years. While the first cost to kill the bugs on an acre of potatoes is rather more than the arsenical insecticides, the extra yield of marketable potatoes has more than paid the entire expense. It is non-poisonous, which makes it perfectly safe to use on all plants or vines.

BUG DEATH PREVENTS BLIGHT.

Put Up In Packages as Follows:

1 -lb. package.....	\$.18
3 -lb. package.....	.40
5 -lb. package.....	.60
12½ -lb. package.....	1.20
100 -lb. package.....	8.00
Dickey Bug Death Duster.....	.25

Arsenate of Lead (Paste)

For Caterpillars and Chewing Insects.

For spraying trees and shrubs against leaf chewing insects, fruit flies and codling moth. Contains 15½ per cent Arsenic Oxide, mixes easily in water without clogging nozzle, sticks like paint, kills quick, and will not burn foliage. Dilute 1 lb. to 25 gallons.

1 lb. \$.25	5 lb. \$1.10	12½ lb. \$ 2.50
25 lb. 4.00	50 lb. 7.50	100 lb. 13.50

To Destroy Ants in Hills, Etc.

Inject bisulphate of carbon in the hills. This will destroy them promptly.

AUTO-SPRAY NO. 1**Capacity About 4 Gallons**

This is the strongest and simplest compressed air sprayer on the market.

More than 300,000 are in use and it has never failed to please our trade during the years we have sold it.

It is used to spray vines, shrubs, trees, potatoes, also for applying disinfectants and whitewash in buildings.

It is made with galvanized or brass reservoir, as ordered. (We recommend the brass because not affected by strong chemicals.)

GUARANTEE—We agree to refund purchase price to any dissatisfied customer within ten days.

NET CASH PRICES

Auto-Spray No. 1-B, brass tank.....	\$8.50
Auto-Spray No. 1-D, galvanized tank.....	\$5.50
2-ft. Brass Extension for trees and low down work.....	.60
Brass Elbow to spray under side of leaves.....	.30
Brass Strainer for filling.....	1.00



Auto-Spray No. 1
Figure No. 418

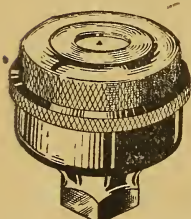
NON-CLOG ATOMIC NOZZLE

This nozzle is what its name implies. It is the only nozzle made which does not and cannot clog.

It may be adjusted for wide or narrow spread of spray and for long distance or near-by work.

We warrant this nozzle and will refund purchase price within ten days to any customer who is not more than pleased.

We repeat **IT DOES NOT CLOG**. One user said the NON-CLOG was worth \$10.00 to him.



Non-Clog Atomic
Figure No. 269

PRICE—Brass, straight or 45 degrees.....\$1.00

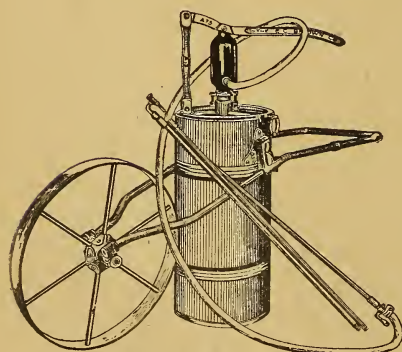
AUTO-SPRAY NO. 40**A General Purpose Sprayer**

Made in two sizes, either galvanized or brass tank and with or without truck.

The pump is powerful, has brass working parts and ball valve, an ample agitator cleans suction screen in operation and mounted on truck with 20-inch wheel, is easily portable on soft ground.

Each machine is equipped with 8 feet of $\frac{3}{8}$ -inch high grade hose, 8 feet of iron extension pipe, lever shut-off and nozzle.

The Auto-Spray No. 40 is adapted to both large and small work and will spray a tree as well as the largest sprayers made. It is largely used for whitewashing and in greenhouses.



Auto-Spray No. 40
Figure No. 426

PRICES

Auto-Spray No. 40-A—Brass tank, capacity 8 gallons, no truck.....	\$15.00
Auto-Spray No. 40-B—Galvanized tank, capacity 8 gallons, no truck.....	12.00
Auto-Spray No. 40-C—Brass tank, capacity 12 gallons, with truck 20-in. wheel...	20.00
Auto-Spray No. 40-D—Galvanized tank, capacity 12 gals., with truck 20-in. wheel	16.00

GOULDS HAND SPRAYERS

Pomona—Standard—Monarch



Goulds "Pomona"
Barrel Sprayer



Goulds "Standard"
Barrel Sprayer



Goulds "Monarch"
Two-Cylinder Sprayer

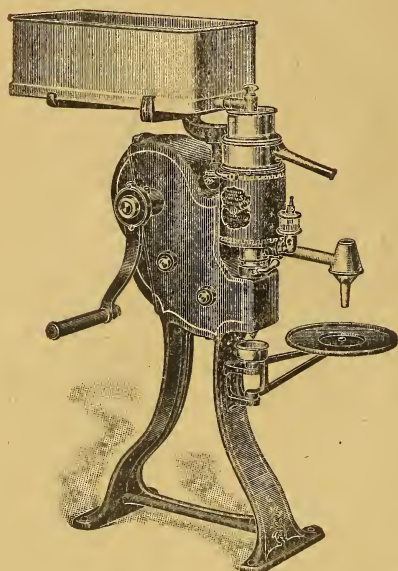
The Pomona is an extra high-grade barrel sprayer with sufficient capacity for two leads of hose and four nozzles. The plunger, plunger connection, gland, valves, valve seat and strainer are solid bronze and are not affected by chemicals. An agitator keeps the solution well mixed, this agitator being operated by a connection to the pump lever. The plunger is $2\frac{1}{2}$ inches in diameter and the stroke is adjustable, 3, 4 or 5 inches.

The Standard is arranged so it can be mounted on the end or side of the barrel as desired. It is made in two sizes with $2\frac{1}{2}$ or 3-inch cylinder. The working parts are bronze. The differential plunger gives a constant even pressure. Price includes brass suction strainer, but does not include suction pipe and agitator.

The Monarch is a large capacity pump for use in a wagon or on skids with the barrels of solution separate. It is useful in large orchards where a barrel sprayer is not of sufficient capacity. This pump is also widely used for whitewashing and painting.

Pomona	With agitator and one lead 15 feet $\frac{3}{8}$ -inch discharge hose with Mistry Jr. spray nozzle mounted on end of barrel.	Price \$20.00
Pomona	With agitator and two leads of 15 feet each $\frac{3}{8}$ -inch discharge hose with Mistry Jr. spray nozzles, mounted on end of barrel.	Price \$23.50
Standard	Fig. 905, $2\frac{1}{2}$ -inch sprayer with 1-inch iron suction pipe, brass strainer, and one lead of 15 feet $\frac{3}{8}$ -inch discharge hose with Mistry Jr. spray nozzle, with Fig. 1321 agitator, mounted on end of barrel.	Price \$20.00
Standard	Fig. 1321 agitator, mounted on end of barrel. pipe, brass strainer, and two leads of 15 feet each $\frac{3}{8}$ -inch discharge hose, with Mistry Jr. spray nozzles, with Fig. 1321 agitator, with air chamber, mounted on side of barrel.	Price \$22.00
Monarch	2-inch cylinder, fitted with 5 feet $\frac{3}{8}$ -inch suction hose with strainer, Fig. 70, $2\frac{3}{4}$ inches diameter and one lead $\frac{3}{8}$ -inch discharge hose 15 feet long with one Mistry Jr. spray nozzle, no barrel supplied.	Price \$30.00
Monarch	$2\frac{1}{2}$ -inch cylinder, fitted up in same manner except has 1-inch suction hose and strainer, Fig. 70, $3\frac{1}{4}$ inches diameter. No barrel supplied.	Price \$33.00
Monarch	2-inch, fitted same manner with 2 leads $\frac{3}{8}$ -inch discharge hose, each 15 ft. long, and two Mistry Jr. nozzles. No barrel supplied.	Price \$35.00
Monarch	$2\frac{1}{2}$ -inch cylinder fitted in same manner except has 1-inch suction hose and strainer, Fig. 70, $3\frac{1}{4}$ inches diameter. No barrel supplied.	Price \$37.00

UNITED STATES CREAM SEPARATORS



To enlarge the income from your dairy you must install modern equipment, such as the United States Cream Separator.

The Interlocking U. S. Separator has NICKEL SILVER skimming sections which are guaranteed to never rust.

The MECHANICAL WASHER furnishes the most complete and quickest method of washing.

The U. S. Cream Separator with its improvements is a SANITARY MARVEL. Important new features make the BEST Separator still BETTER—the MOST PERFECT ever produced anywhere by anybody.

A great SANITARY feature is the new REMOVABLE LINER for bowl chamber. It is non-rusting and easy to wash. Milk, even in the smallest quantity, coming in contact with cast iron makes all other Separators unsanitary. The liner, exclusively a U. S. feature, prevents milk contact absolutely.

A new feature is the AUTOMATIC OIL CONDUCTOR which conveys fresh oil from the neck bearing to gear chamber and with its DUST SHIELD serves a dual purpose by keeping all foreign matter, dust, etc., from the gear chamber and lower bearing, adding years to the life of a Separator and permitting the machine to always run as easy as when new.

A U. S. Cream Separator will make you the most money, because it skims the closest. It holds the World's Record for closest skimming in fifty consecutive runs with milk from ten different breeds of cows.

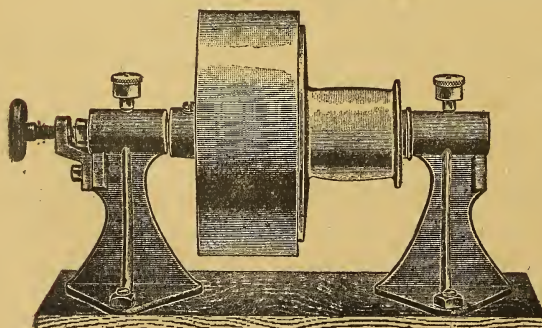
Latest Interlocking Style

No. 40, guaranteed capacity	175 lbs.	\$35.00	No. 16, guaranteed capacity	600 lbs.	\$85.00
No. 39, " "	300 "	50.00	No. 15, " "	750 "	95.00
No. 18, " "	350 "	65.00	No. 14, " "	1000 "	110.00
No. 17, " "	450 "	75.00	No. 12, " "	1350 "	135.00

Power Attachments for Dairy Sizes

Clutch Pulley, 14 in. diam., 3 in. face, including shaft for crank.....	\$3.50
With additional Loose Pulley, extra.....	3.00
Pulleys 12 inches diameter can be supplied if desired at same prices.	
Separators fitted with Ratchet and Loose Pulleys 3 in. diam., 1 1/4 in. face, with Belt Shifter for Worm Gear Shaft (when ordered with separator). Additional price.....	6.00
3-inch Pulleys with necessary attachments (when not ordered with separator). Prices on application.	
Self Governing Pulley, for engine or line shaft only (give size of shaft).....	6.50
Speed Governing Pulley, adjustable while running.....	9.50

THE RANDOLPH GOVERNOR PULLEY



14-inch Clutch Pulley including Shaft, \$3.75 extra.

As shown in the adjoining cut absolutely governs the speed of the separator, releasing automatically when the proper speed is attained and absorbing all shocks from the gasoline engine. It runs in either direction without any change or adjustment. The pulley standard can be placed on the floor, side wall or overhead to suit conditions. We have embodied in the construction of this pulley the loose pulley feature whereby the Separator may be stopped without stopping the engine.

Attention is called to the fact that after the proper speed has been attained by setting the jamb nuts on the hand-wheel thread the correct speed will be maintained without further notice. Price, \$10.00.

MILKMEN AND DAIRY SUPPLIES.

Quart Milk Bottles	\$.70 per doz.	Wholesale Cans, all sizes	\$.40
" " "	6.50 per gross	Strainer Pails	.65 to .75
Pint " "	.60 per doz.	Pint Dippers	.25 to .45
" " "	5.50 per gross	Quart Dippers	.35 to .50
Half Pint Milk Bottles	.50 per doz.	Strainers	.50 to 2.00
" " "	4.25 per gross	Tin Milk Pans, per doz	1.50 to 3.00
Milk Cans 50 quart	4.50	Tin Milk Pails, all sizes	.30 to .75
" " 40 "	3.75 " "	Sprinkling Pots, "	.25 to 1.25
" " 30 "	3.00 " "	Excelsior Strainers	2.50
" " 20 "	2.75 " "	"Our Own" Strainers	2.50
Milk Caps	25 per 1000	Aerators	5.00 to 7.00
Carrying Cans, all sizes	.50 to 2.25		

LISK'S SANITARY PAIL



This Sanitary Pail combines nearly all of the good points that are contained in the many kinds put on the market in recent years, and is highly recommended by the Boards of Health and the State Milk Inspectors. A trial will convince. Price, \$1.75.

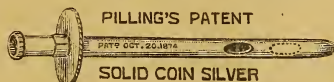
MILK FEVER OUTFIT.

For Sterilized Air Treatment.

This treatment has cured 97 per cent. of all cases treated. This treatment is recommended by the Bureau of Animal Industry, United States Government, Department of Agriculture.

The outfit consists of the instrument, a roll of tape, a package of carbolized cotton. Full directions, neatly packed. Price, \$3.50 net

MILKING TUBES.



Full Directions with Each Tube. 35 cents to \$1.25 each.

SCALES.

Dairy Scales \$3.00 to \$3.50

Platform Scales \$15.00 to \$25.00

RICE'S CALF WEANER AND SUCKING COW MUZZLE.

For preventing Calves and Cows sucking themselves or each other.

No. 1.—For Calves till 1 year old, 35c, by mail postpaid 40c

No. 2.—From 1 to 2 years old, 60c, by mail postpaid 65c

No. 3.—For full grown animals and self suckers, 75c, by mail postpaid 85c

BARREL CHURNS.

No. 0,—	4 gallon, will churn,	2 gallons	\$4.00
No. 1,—	10 "	5 "	5.00
No. 2,—	15 "	8 "	5.50
No. 3,—	20 "	10 "	6.00
No. 4,—	25 "	12 "	7.50
No. 5,—	30 "	14 "	8.50

Oak Dash Churns, Stone Dash Churns, Dog Powers, Butter Workers, Skimmers, Butter Carriers, Ladies, Richardson's Butter Color, Butter Prints, Floating Glass Thermometers, Dairy Thermometers, Cream Gauges, Babcock Butter Tester.



MILK BOTTLES.

1 quart, 70 cents per doz.
1 pint 60 " " "
1-2 " 50 " " "

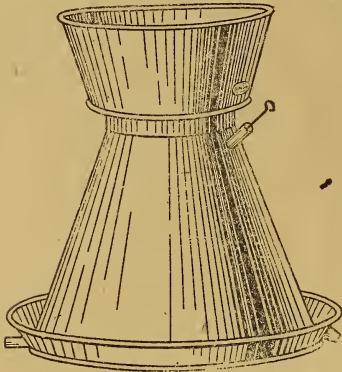
Special price in gross lots.

MILK CAPS.

Per thousand, 45 to 52 cts.

CHAMPION MILK COOLER AERATOR

Automatic, Simple, Efficient, Durable.



1—10 quarts, 1 to 10 cows, 2 milkers..	\$ 7.00
2—18 quarts, 10 to 25 cows, 3 milkers..	7.50
3—34 quarts, 25 to 50 cows, 5 milkers..	8.00
4—52 quarts, 50 to 100 cows, 8 milkers..	10.00

SENSIBLE BOTTLE FILLER



We have built the Sensible so strong and heavy that it will last a life time.

You can find no more sensible way to fill your bottles. Price \$4.50.

SECURITY CALF MEAL

Security Compound is not a calf meal, does not have to be cooked or bothered with like calf meals; does not require milk like calf meals, for Security Compound is a chemical reproduction of cows' milk and takes the place of the cows' milk after the third day.

Security Compound will fatten your calf for vealing at a cost of 10c a day. If you sell your veal in 28 days your calf will only cost you \$2.80. The milk alone fed with calf meals cost \$3.20 for the same number of days and you have to buy the meal additional. Therefore Security Compound is cheaper than calf meals and will produce a better calf. The company's guarantee to every farmer is this: "We guarantee that you can raise as good, fat, and healthy a calf on Security Compound as on whole, fresh milk." Your money back if it does not meet this test. Price, 12½ lb. package, \$2.75; 25 lbs., \$4.25. Special price in large lots.

SAVES THE MILK



SAVES THE CALVES



SAVES YOU MONEY

Ryde's Cream Calf Meal
RICHEST SUBSTITUTE FOR MILK

Will take the place of whole milk in either raising or vealing calves, at about one-third the cost of feeding milk. It is the only correct combination of materials to nourish calves properly with all the fibre and indigestible matter removed, thoroughly cooked and prepared for easy digestion and assimilation. Made with the care of baby food. Safe for baby calves.

Francis M. Jones of Clinton, N. Y., writes: "I can recommend Ryde's Cream Calf Meal as the best calf meal I have ever used."

THE MILK IT SAVES IS WORTH THREE TIMES ITS COST.

100-lb. Bags, \$4.00

50-lb. Bags, \$2.25

25-lb. Bags, \$1.20



*"Good
to the
last
drop"*

Blatchford's Calf Meal

The Complete Milk-Equal

is in reality a substitute for milk—and should not be considered as an ordinary "feed" or "meal."

It contains all the elements of milk and when properly prepared becomes a "baby food" for calves and colts.

It is just the thing for weaning calves as soon as they can be taken away from the cow. Then all the milk may be sold and you get the benefit of the high creamery prices.

It is absolutely the only milk-substitute that contains all the elements necessary for rapid and healthy growth, and the only calf meal that is thoroughly cooked and prepared for digestion.

*Will push calves and colts forward better and quicker
than any other food*

100 pounds makes 100 gallons of Complete Milk-Equal

Average analysis of
Blatchford's Calf
Meal from a number
of analyses taken at
various times:

Protein . 25 per cent
Fat . . . 5 per cent

100-pound bag,
50-pound bag,
25-pound bag,

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

EVERY HOG A MONEY MAKER

Keep your hogs free from worms. These deadly pests will rob you of your profits—starve your stock—make them thin, scrawny and finally kill. If you follow the advice of the best stockmen, you will have

NO MORE LOSSES FROM WORMS

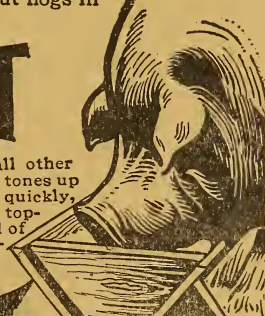
E. C. Stone, Sec. of the American Hampshire Swine Record Assn. says: "I know of nothing so good, reliable and cheap to expel worms and put hogs in condition to digest food as Sal-Vet."



TRADE MARK
SAL VET

REG. U.S. PAT. OFF.

is a medicated salt—different from all other worm remedies. Safe, sure to kill worms, tones up your stock, helps turn food into fat and flesh quickly, puts animals in prime condition to get top-market prices. Commence getting rid of robber worms today. Use Sal-Vet—costs but 1-2 cent per day, per hog or sheep.



FOR SALE BY

F. H. Ebeling

Each 10 lb. drum.....	\$.75	Each 100 lb. keg.....	5.00
Each 20 lb. drum.....	1.25	Each 200 lb. bbl.....	9.00
Each 40 lb. drum.....	2.25	Each 300 lb. bbl.....	13.00

THE JAMES WAY



SYRACUSE UNIVERSITY BARN AND STABLES

The above photograph shows one of the buildings connected with the Syracuse University College of Agriculture, and which contains the celebrated

JAMES STANCHIONS, STALLS AND LITTER CARRIERS

The following is a partial list of users of the celebrated James Sanitary Barn Equipment:

George Ferguson, North Syracuse, N. Y.	P. D. Schuyler, Camillus, N. Y.
Stevens Bros. Co., Liverpool, N. Y., Holstein breeders.	Henry Carhart, Minoa, N. Y.
H. M. Dunham & Son, Marcellus, N. Y., Holstein breeders.	Greiner Bros., East Syracuse, N. Y.
J. A. Stanton & Son, New Woodstock, N. Y., Holstein breeders.	A. J. Helfer, Minoa, N. Y.
F. M. Jones, Clinton, N. Y., Holstein breeder.	John Arfman, Middletown, N. Y.
E. H. Dollar Est., Heuvelton, N. Y., Holstein breeders.	Sharpless Separator Co.
Borden's Condensed Milk Co., certified plants at Earlville, Edmeston, Walkill.	
J. H. Gallup, Syracuse, N. Y.	
Alfred Ferguson, North Syracuse, N. Y.	
A. L. Brockway, Syracuse, N. Y.	
Carl Amos, Syracuse, N. Y.	
W. R. Percival, Syracuse, N. Y.	
John Craig, Solvay, N. Y.	
Mohawk Condensed Milk Co., and many others.	

THE JAMES STALLS AND STANCHIONS

The man who depends on his cows for his living, must take advantage of every opportunity to save the time of his hired help and his own time; to prevent waste of feed; to avoid disease of all kinds; and he must use every proper means of increasing the yield of milk, and of getting a bigger price for his product.

James Equipment is designed specifically to meet every one of these needs. It keeps cows cleaner; saves labor, time and feed, all of which cost money; aids in preventing and curing tuberculosis and other diseases; prevents accidents that might cause abortion or ruined udders; increases the yield of milk, by making the cow almost as comfortable as in the open pasture; and the equipment, if you sell milk direct to the housewives, can oftentimes be used in such a way as to get more customers and a bigger price per quart.

At the same time, the equipment presents such a handsome appearance in the barn, that nothing better could be wanted in any stable, however fine.

Until the James Equipment was invented, stalls and stanchions were merely means of tying cows.

James Stalls and Stanchions tie the cows, all right—tie them so they can't get loose until they are turned loose—but the James Stalls and Stanchions are far more than mere cow ties.

Important as it is that the cows be tied securely, there are a dozen other ways in which the James stalls are of equal value.

The saving effected by the James Equipment amounts to as much in a year as the cost of the equipment itself; it is the biggest moneymaker on the dairy farm, and you are losing big profits every day you do without it.

FOR PRICES SEND FOR LARGE CATALOG

THE JAMES WAY

James Watering Buckets

Every dairyman now realizes that regardless of how well the cow may be fed and cared for in every other way, the maximum yield of milk cannot be secured unless she has plenty of water. The old way of watering once a day out in the yard is the most expensive that could be devised. The cows become very thirsty, and drinking excessively of cold water, become chilled, and are forced to use up energy getting warm that should have been used in making milk. But the increase of milk yield is not the only advantage. There is also the saving of time and labor of the attendants, and, as compared with other methods of watering in the barn, a saving of water. More important is the prevention of the spreading of contagious diseases through the water, for with the James Watering Buckets each cow is furnished pure, fresh water, direct from the protected supply tank.

THE JAMES CARRIERS

James Carriers are "long life" carriers—built to stand the strain and wear of years—made to forestall breakages and repairs—made to save the maximum of work and time. We are proud of them, believing that each is the best that can be built to meet the specific purposes for which it is designed. And in this belief, we are backed up by hundreds of enthusiastic, commendatory letters.

The James Ventilator

The James Ventilator is absolutely storm proof—neither snow nor rain can enter; nor can birds get in, all openings being covered with galvanized bird proof netting.

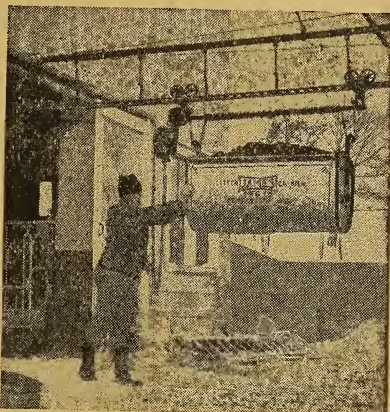
The James Ventilator with the open base, ventilates the haymow as well as the stable.

Can't Afford It

One of the most powerful of all evil influences affecting the cause of good farming is the state of mind in the farmer that is constantly saying "I can't afford it." It begets a state of unbelief in better things, better methods, better cattle, and all kinds of farm stock, better buildings and better homes.

Before a farmer can take the first step towards improvement he has to overcome this ghost that is constantly before his eyes, "I can't afford it." He never sees the real truth behind that delusion which is, that he cannot afford to do anything except in a most thorough and painstaking manner.

"CAN'T AFFORD IT" has kept thousands of farmers with their noses down to the hard grindstone of bad, wasteful methods; poor, unprofitable live stock; bad methods of soil cultivation. In short, it is the spirit that is OPPOSED to more than it is in favor of. AND IN THAT SPIRIT NO FARMER EVER DID GO AHEAD."—From Hoard's Dairyman.



The James Way

BIG ILLUSTRATED CATALOG

"The James Way" (Catalog No. 20) is a handsomely illustrated book of 256 pages, giving complete information regarding James Sanitary Barn Equipment and showing how to build and equip a practical, up-to-date dairy barn.

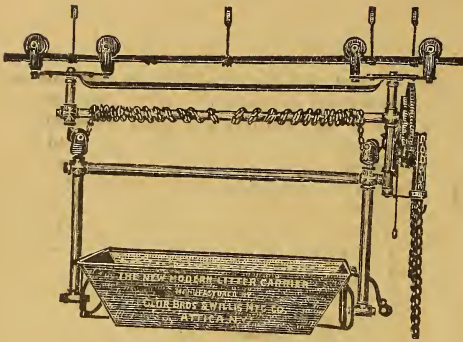
If you have any intention of building a dairy barn, or remodeling, or even rearranging, you should write at once for a FREE copy.

This book will give you information regarding the fundamentals in barn construction; the construction of plank frame barns; the King system of ventilation and its installation; the proper width and arrangement of barns; lighting; stable floors and their construction; information regarding site, size, appearance, design, drainage and equipment, together with a number of barn plans and other information of interest to dairymen who intend to build new barns or remodel old ones.

The information contained in this book has enabled many local dairymen to save money in the building of their barns and in operating the plant after the barn was completed.

The book has cost considerable money to publish, but we will send it free, postpaid, to any dairy farmer who intends to build a barn.

SANITARY STABLE FIXTURES



No. 115 Litter Carrier

NEW MODERN

LITTER AND FEED CARRIERS

Single and Double Trolleys

Crank or Chain Hoist

Strongest and easiest running Carrier made. The most practical and up-to-date time and labor saver on the market. Carries the litter away from the stable and saves you three-fourths the expense. Pays for itself in a short time.

THE NEW MODERN WATERING SYSTEM



No. 410

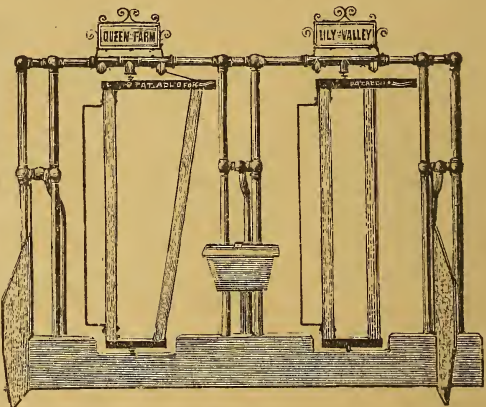
This Watering Basin with our system will furnish a cow with fresh water at any time. This means an increase of from 5 to 10 per cent in the flow of milk. The basins are cast iron thoroughly coated, round corners, smooth bottom. Inlet on the back side tapped for 3/4-inch pipe. Covered with strainer, hinged so that the particles of chaff can be easily removed. Hardwood back board included with each basin. No. 1, price \$1.50; No. 2, price \$1.75.

Galvanized iron covers, practical and sanitary. Cattle soon learn to raise the covers themselves. The drop is automatic. Price 35c and 50c.

NEW MODERN SANITARY STEEL STALLS

Steel or Wood Stanchions, Chain or Pivot hung; Manger Partitions, Guard Rails, Name Plates, Feed Mangers, Hay Racks, Hog Troughs, Tanks, Box Stalls, Calf Pens, Piggeries, Square End Guards, Adjustable Steel Gates, Horse Stall Guards, Salt Bricks, Cork Floors and Ventilating Systems complete.

Litter Carrier No. 115, Double Trolleys, Chain Hoist, Capacity 700 to 1000 lbs.....	\$45.00
Litter Carrier No. 112, Double Trolley, Crank Hoist.....	37.50
Ensilage Carrier No. 113, 25 bushel Capacity, Double Trolleys.....	40.00
Platform Carrier No. 114, Double Trolleys, Crank Hoist.....	37.50
Platform Carrier No. 114, Double Trolleys, Chain Hoist.....	45.00
Track including Hangers every 28 inches, per foot.....	.25
Curves including Hangers every 14 inches, per foot.....	.30
Latches for Track through Rolling Doors.....	1.00
Two-Way Switches.....	2.50
Switch Adjusters.....	7.50
Extra Hangers with Nails, per doz...	1.20
5/16 inch, 7 Wire Strand, per foot....	.04
Stall No. 300 Double Standard, Steel Frame.....	5.50
Stall No. 310, Single Standard, Steel Frame, per stall.....	4.20
Stall No. 330, Wood Standards and Top, Angle Iron and Sockets.....	2.25
Stall No. 330, All Wood.....	2.25
Stanchions No. 20, Pivot Hung, Wood Bar.....	1.65
Stanchion No. 25, Chain Hung, Wood Bar.....	2.25
Stanchion No. 16, Pivot Hung, Steel Wood Lined Bar.....	2.50
Stanchion No. 15, Chain Hung, Steel Wood Lined Bar.....	2.00



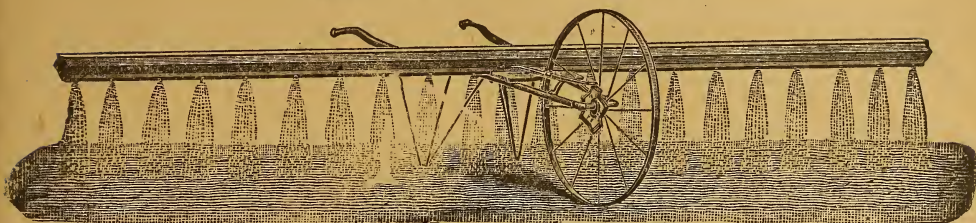
No. 300

We Equip Stables Completely

All of our goods are made of the very best of material by workmen who take a pride in their work. With ordinary usage they will last a lifetime.

Prices subject to change without notice.

WHEELBARROW SEEDERS



WITH WOOD OR IRON FRAME.

They can be worked by anyone who can run a wheelbarrow,
Price, 14-foot, \$7.00; 16-foot, \$8.00.

THE LITTLE GIANT SEED SOWER

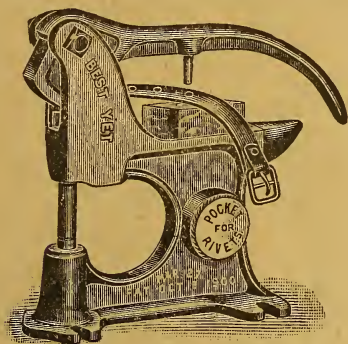
This is the cheapest Crank Seeder on the market, and equal to the best for quality of work it does and durability. Don't pay \$5.00 for a seeder when you can get its equal for less money.

Will sow Wheat, Oats, Rice, Flax, Millet, Turnip Seed, Clover Seed, Grass Seed, including Light grasses; in fact any kind of Seed broadcast. Also Plaster, Fertilizer, Salt, Ashes, etc.

They save one-third seed and two-thirds labor.

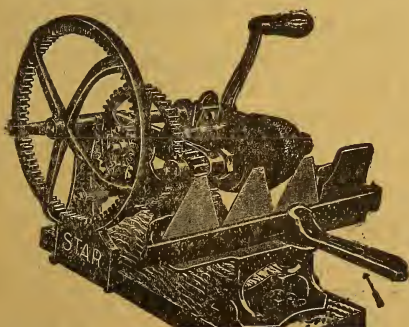
CRANK SEEDERS - - - \$2.25
FIDDLE SEEDERS - - - \$2.00

THE "REX" RIVETER



THE BEST.

The cheapest, most durable and the most Practical Riveting Machine on the market.
Price 75c and 1.00



STAR SICKLE GRINDER, \$5.00

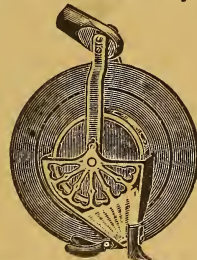


Eureka Kitchen Garden Seed Drill and Hot Bed

It will sow and cover Beets, Cabbage, Carrots, Celery, Lettuce, Onions, Radishes, Spinach, Turnips, and all such seeds with the greatest regularity. Force Feed. It is only intended for small Gardens and Hot Houses.

Sows up close to the sides in straight rows. Sows the small packet of seed as well as a larger bulk. This Drill is not a toy, but a strong, practical machine that will last many years.

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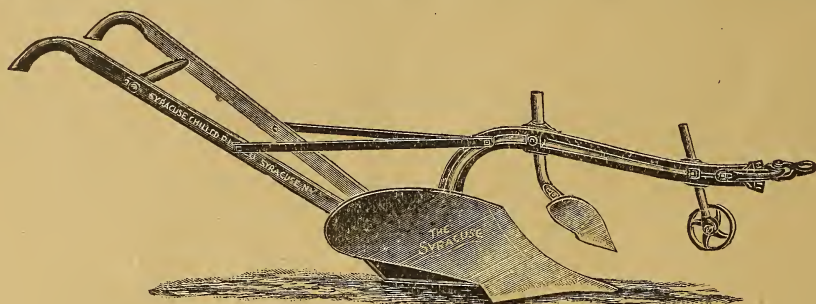
Imboden's Harrow on free trial, without money in advance. Return at our expense if it does not please you. Fixtures to use Harrow and Roller separate and to make a riding cultivator. Guaranteed combined to give 50 per cent. better and nicer seed bed in half the time. Field looks like a garden, no foot prints are left. Can see check marks easier. Saves 1 team, and no heavier draft. A boy can do the work and ride. Operate teeth any depth, is ready in a second to move. Hundreds of them in use since 1900. Just ask for reports, description, price and terms.

Sold by F. H. EBELING.

Price \$38.00.

SYRACUSE CHILLED PLOWS

These Plows are so well known that no word of introduction is necessary. We are pleased to offer their full line to our farmers at the usual prices.



Syracuse Steel Beam Chilled Plow

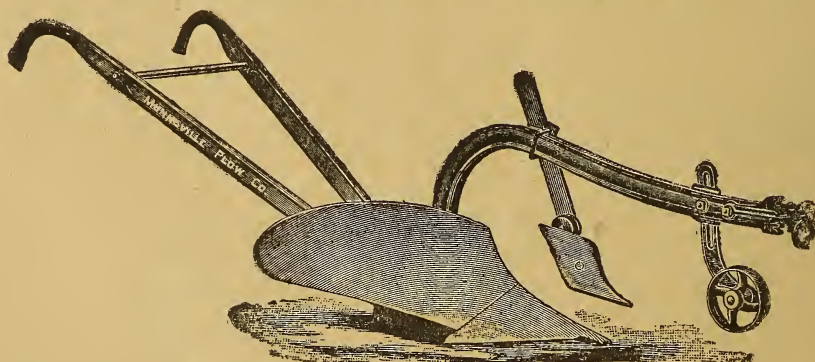
Made in three sizes, No. 401, No. 402 and No. 403

Chilled Wearing Parts, Light, Strong, Durable

No. 403—Light Two-Horse,	furrow 4 to 6 inches deep, 9 to 12 inches wide.....	\$16.25
No. 402—Medium Two-Horse,	furrow 5 to 7 inches deep, 11 to 14 inches wide.....	16.75
No. 401—Large Two-Horse,	furrow 5 to 8 inches deep, 12 to 15 inches wide.....	17.25
No. 31—Large Two-Horse,	furrow 5 to 8 inches deep, 12 to 15 inches wide.....	20.25
No. 32—Large Two-Horse,	furrow 5 to 8 inches deep, 12 to 15 inches wide.....	19.75
No. 61—Large Two-Horse,	furrow 5 to 8 inches deep, 12 to 15 inches wide.....	19.25
No. 62—Large Two-Horse,	furrow 5 to 8 inches deep, 12 to 15 inches wide.....	18.75
No. 31-39—Reversible Sulky, 3-horse hitch.....		75.00
No. 5-1878—One-Horse, iron beam and wheel.....		9.50

MUNNSVILLE PLOWS

No. 10, All Steel Plow—"The Big Seller"



This Plow is long on the run with a high moldboard, of a shape that insures easy draft, good cleaning qualities and pleasing appearance. Price \$18.50.

Munnsville No. 46—Chilled Plow, \$17.00.

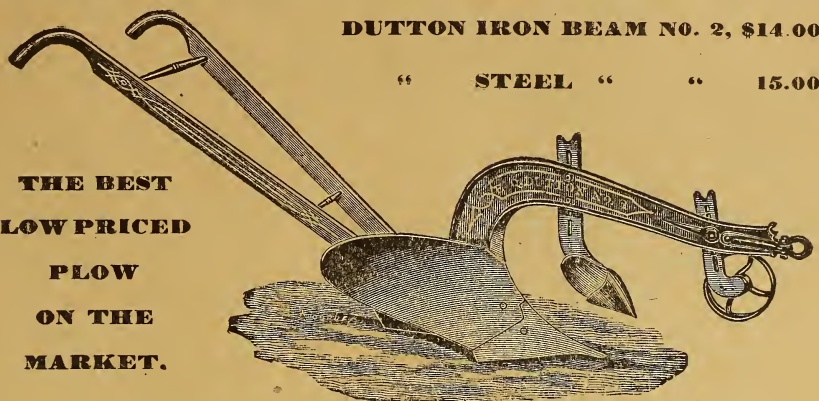
Munnsville No. 7—One-horse Plow, \$14.00.

ONEIDA VALLEY CLIPPER NO. 2 1/2

A light one-horse cast steel Plow, adapted to plowing out corn, hops and nurseries. Can be gauged so as to plow to and from the rows.

Price, \$13.50 Plain. No. 2 1/2 Chilled, \$14.00.

Dutton Steel and Chilled Plows



DUTTON IRON BEAM NO. 2, \$14.00

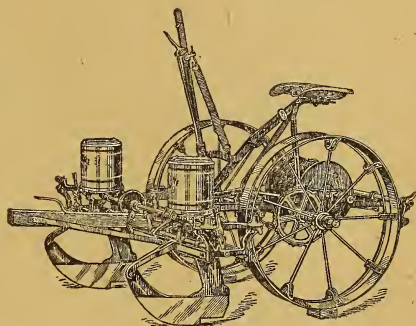
“ STEEL “ “ 15.00

**THE BEST
LOW PRICED
PLOW
ON THE
MARKET.**

DITCHING PLOWS, PRICE \$10.00

DEERE CORN PLANTER

A Corn Planter is absolutely worthless unless it will plant your corn accurately. The John Deere No. 999 will do this. Field trials and tests under varying conditions have proven conclusively that the John Deere No. 999 Planter is the most perfect variable drop Corn Planter made. The variable drop consists of a train of gears constantly in mesh whereby two or three kernels can be planted, as desired, by merely shifting the foot lever. The John Deere No. 999 is a full variable drop Planter both for hilling and drilling, as it also varies the distance in drilling, giving a greater variety of distances than the ordinary planter without the use of extra sprockets and plates. A very simple and highly efficient machine. Complete with Fertilizer Attachment. Price \$65.00.



Bargains in Tools and Implements

We offer at an especially low price the following list of tools and implements—every one of which is a genuine bargain and can be seen at our warehouse. Some of these have been somewhat used.

- 1 Sterling S. D. Rake.
- 4 Bullard Hay Tedders.
- 1 14-16 Adriance Disc Harrow
- 1 Ridging Roller.
- 1 Darnell Furrower and Marker.
- 1 Webber Fanning Mill.
- 1 2-horse Gas Engine, vertical.
- 1 3-horse Gas Engine.
- 2 Emerson Low Down Manure Spreaders.
- 2 11-7 Empire Drill, somewhat used.
- 1 Comb. Roller and Harrow

- 1 Covered Cutter.
- 1 Top Buggy.
- 1 Family Carriage.
- 1 Keystone Weeder.
- 1 Standard S. T. Harrow, 15 tooth.
- 1 Gal. 60-tooth Peg Harrow.

- Also Bargains in 20th Century Low-Down Manure Spreader and Emerson Manure Spreader, and Lumber Wagons.
- 1 4-horse Gas Engine.
 - 1 6-horse Gas Engine.

All new and in good condition.

All new at a special price.

- 1 Second-hand Low-down 20th Century Spreader. Price \$50.00.

- 1 20th Century Spreader. Price \$25.00.

Both in working order.

Cutaway

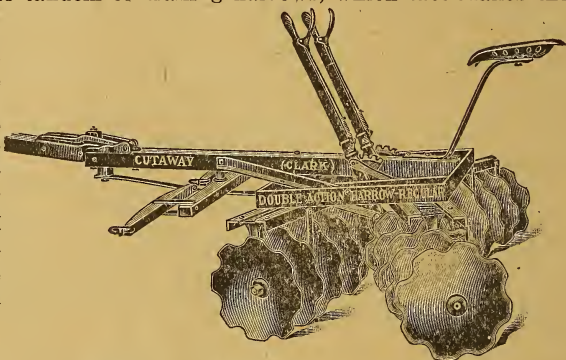
(CLARK)

DOUBLE ACTION DISC HARROW

The farmer who realizes the importance of stirring and pulverizing the soil so that the sun and air and moisture can reach every particle is the man to whom the CUTAWAY (CLARK) Double Action—the original double action—means something more than just a disk harrow. No other disk harrow of any make or style even approaches the CUTAWAY (CLARK) Double Action for pulverizing the soil, for saving time, for saving horses, for giving long service. Its superiority for pulverizing the soil and giving long service has seldom been questioned.

The rigid main frame is the all-important feature in any double acting harrow. This frame holds the rear gangs so that the rear disks cannot slew to the furrows cut by the fore disks, but instead cut midway between where the fore disks have cut, thereby making the machine pulverize every inch of the soil to the full depth to which the disks run.

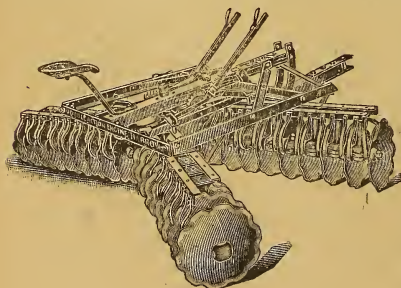
The distance from the hitch to the extreme rear end of the harrow is but a little more than one-half of that on the tandem or trailing harrows, which fact makes the draft from 25 to 50 per cent less than in other harrows of corresponding size. By the elimination of the tongue truck we save the buyer from \$4.00 to \$5.00. The oil-soaked hardwood bearings are encased in a new dust-proof boxing, the most perfect yet designed for disk harrows. The lubrication is done through the standard, the oil dropping directly on top of the bearing spool inside of the bearing. The disks are cutlery steel forged sharp.



In addition to this, the prices are attractive, as follows:

A-4 Double Action Cutaway.....	\$45.00
A-5 Double Action Cutaway.....	50.00
A-6 Double Action Cutaway.....	60.00
Reversible Sulky Disk Plow.....	40.00
Bush and Bog Plow.....	80.00
Clark's Grove Harrow.....	30.00
Cultivator and Harrow.....	48.00

The CUTAWAY HARROW COMPANY was the first to design a disk harrow to meet the particular requirements of tractor use. This harrow has been on the market as a perfectly working tool for more years than any other Engine Harrow. There is no horse harrow built which will give satisfactory and lasting service with a tractor. In the development of a special harrow for tractor use has been its success.



The general design of these tractor harrows is shown in the illustration at the left. They are made in all sizes, cutting from 4½ to 12½ feet wide; and for tractors delivering from five to fifty horsepower. Any farmer who owns or expects to buy a tractor owes it to himself to let us tell him more about these CUTAWAY (CLARK) Tractor Harrows if he wants to make the best use of his power.

Ask us for special folders describing these CUTAWAY (CLARK) Disk Implements. The book, "The Soil and Its Tillage," free on request at our store.

THE KEYSTONE ADJUSTABLE FLAT-TOOTH WEEDER

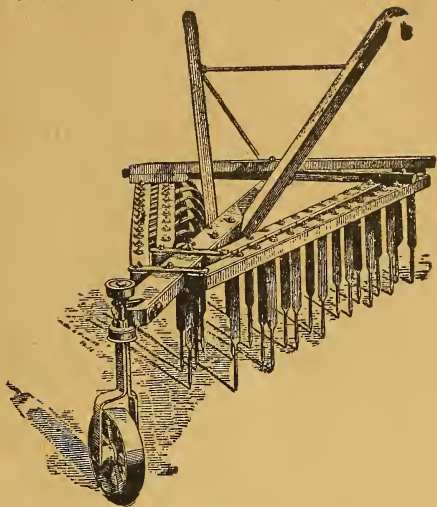
(The Keystone Adjustable Flat-Tooth
Weeder narrowed to 30 inches.)

This is the most useful and practical
Weeder of the many Weeders on the market.
Every gardener and farmer should have one.

Weight, 97 Pounds

Price \$16.00

Can be expanded to 7½ feet if desired.



ACME PULVERIZING HARROW AND CULTIVATOR

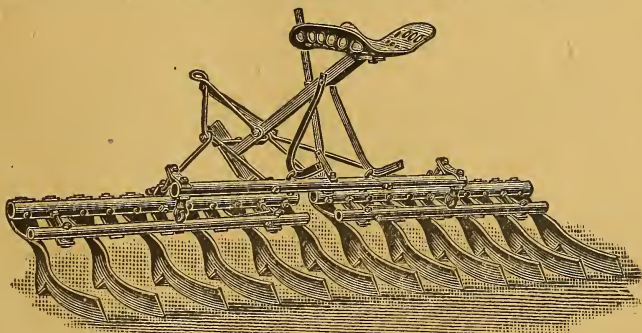
STANDARD 2-ROW RIDING HARROW

Lightest Riding Har-
row sold anywhere. Low
in price, light in draft,
most easily handled.

Cuts, crushes, turns,
smooths and levels, all
in one operation.

6 ft. 6 in. Two Horse
Size

PRICE \$16.00



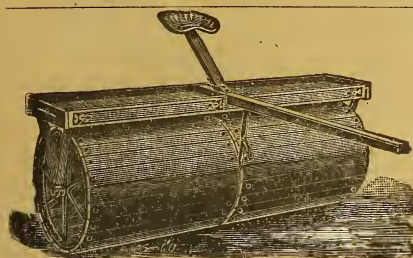
LAND ROLLERS

Oak Stave Roller, two sections.....\$25.00

Steel Roller, 26 inch, two sections, with
closed ends.....\$28.00

Lawn and Garden Roller...\$10.00 to \$15.00

These Rollers are made of the best mater-
ial and made near home. All parts can be
easily supplied.



RIDGING ROLLER

This Roller machine is made with wheels 15 inches in diam-
eter, also 18 inches in diameter, each wheel being 4 inches wide
with six spokes, three on each face, made in one solid casting.
This machine does excellent work, compressing the soil but does
not leave it flat.

ROLLER
BEARING
SINGLE
GANG
PULVERIZER



packing and pulverizing the ground—keeping the soil moist.

7-foot Roller, 15-inch.....\$33.00

8-foot Roller, 15-inch.....37.50

This roller does splendid work in prepar-
ing the seed-bed and is highly recommend-
ed by Government Experimental Stations.
The "little ditches" formed by this roller
catch and hold the heavy dews and rains
and act as little irrigating ditches. These
will also hold the snow and prevent it from
being blown over the fields in winter grain
or new seeded Alfalfa fields; thus forming
a blanket of snow protection for all grain
and seeded fields. Also, breaks up the lumps,

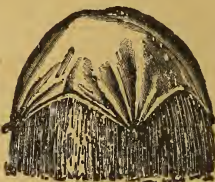
7-foot Roller, 18-inch.....\$38.00

8-foot Roller, 18-inch.....40.00

HAY CAPS—Insurance Against Wet Weather

The value of keeping your hay dry, and especially, Alfalfa was sharply emphasized during the past season of excessive rains, owing to the heavy losses suffered by our Alfalfa growers in this county, and which ran up into many thousands of dollars; also proving to be a heavy annual loss due to uncertain weather conditions. To illustrate how such losses can be controlled, we need only to refer to the methods employed by Chancellor Day on his University Farms. When it became apparent that heroic measures must be used, the Chancellor made use of some five hundred hay caps which we ordered by express. This quick action saved the University from a heavy loss and all of their hay was saved without any damage to the Alfalfa, and which cured perfectly under this cover. But for the Chancellor's characteristic energy and promptness it would have proven a serious loss.

One of the questions often asked is how to fasten the corners down, and everyone has their own ideas on this. One way is to use pegs attached to the eyelets in the corners of the Caps, another simple way is to tie stones, brick or gravel in a piece of burlap or rag, of sufficient weight to hold corners down and tie to the eyelets, others again have suggested a lead weight sewed in each corner. It is better for this to be done on the farm, as when shipping, it adds to the cost of freight to have so much extra weight.



We offer the best quality and other grades at market prices.

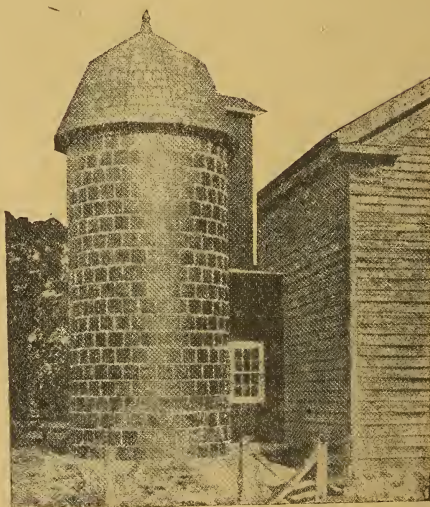
NATIONAL FIRE PROOFING COMPANY NATCO IMPERISHABLE SILO (Patented)

Here's the new type of silo—the silo that has raised the standard of quality of ensilage for feeding. The silo whose walls are moisture proof and air tight and consequently keep ensilage from becoming sour, moldy or rotten.

THE NATCO IMPERISHABLE SILO is built of hollow vitrified-clay tile, reinforced by two continuous steel bands between each layer of blocks. There are no staves to warp, shrink or split. No hoops to tighten. No continual repair bills. Never needs painting. The Natco Imperishable Silo is Weatherproof, Decayproof, Fire-resisting.

It will last a lifetime and the first cost is practically the last cost. It can be erected by any mason as easily as a carpenter builds the old type of silo. When completed you have a very attractive as well as an efficient and durable silo added to your permanent farm building assets.

WRITE FOR FREE SILO BOOK.

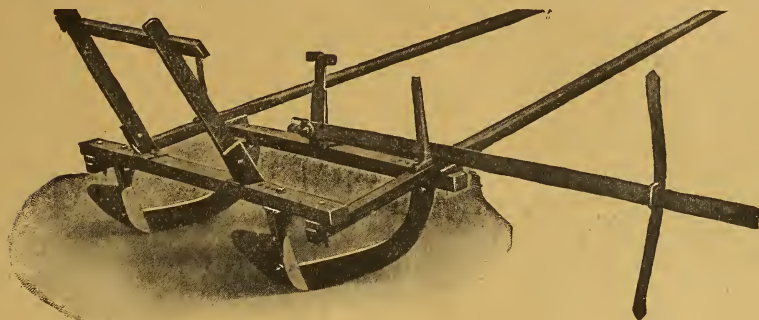


Hollow Tile Silo.

STONE'S WAGON POLE SUPPORT

This splendid device carries the tongue, neck-yoke and whiffletrees. Gives greater comfort, being free from the horses' necks. These supports have sufficient length of steel to make them flexible and easy on tongue and hounds. This spring relieves the horse of entire weight. Does not affect running of wagon. It prevents sore necks. Keeps tongue off the ground, easily applied. Price \$2.50

THE IMPROVED THREE-ROW CORN MARKER



This out shows our Steel Wing Marker. The runners are long, which enables it to make true and even mark. It is adjustable to mark any width row and any depth desired.

Two-Row Marker for one horse, \$9.00. Three-Row Marker for two horses, \$10.00.

Bemis Transplanter

Sets all kinds of plants like cabbage, tobacco, etc. The success of plant setting is assured by its use. The most successful planter on the market. Made near by, and all parts supplied on a few hours' notice. **Price \$75.00.**

FARMERS' COMBINATION CLAMP AND DRILL.



\$3.00 with Diamond Point Drills.

\$3.50 with Syracuse Twist Drills.

The lowest priced first class article of its kind on the market. Can be used as a wood clamp, also a bench vice, or hand drill.

Extra Drills 10c each.

Extra Drills 25c each.

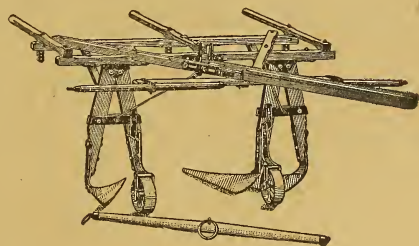
PROUT'S HOEING MACHINE

The Representative Tool of Level Cultivation

A perfect substitute for hand hoeing. Hill or flat cultivation, as desired.

Now made with handles adjustable for tall or short operator and with improved standard as shown.

It cuts over all the ground, and tears out every weed by the roots, leaving the fields clean in the fall.



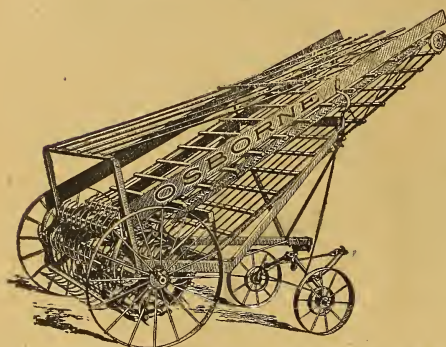
It is worth its cost for ridding a farm of weeds.

It will not injure the corn roots, while it leaves the land level.

It is unequalled by any other tool in the cultivation of corn, potatoes, tobacco and all kinds of root crops. Not a new and untried machine, but thousands already in use, giving unequalled satisfaction. It materially lessens the cost of hand labor, while it increases the crops. You cannot afford to be without one. Ask for further particulars. **Price \$25.00.**

All Prices liable to change without notice.

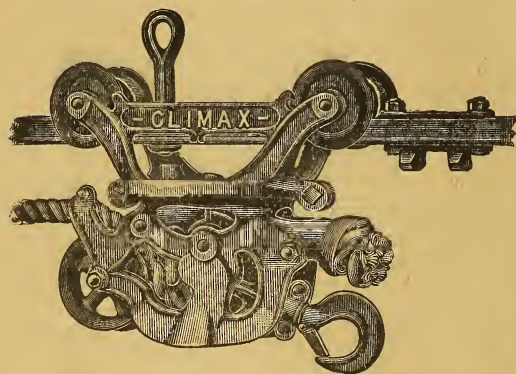
THE OSBORNE WINDROW HAY LOADER



The Osborne is a remarkably simple loader—in fact, it would be difficult to imagine a more simple loader. The entire mechanism of this loader consists of a gathering drum, which picks up the hay, and an elevator carrier, the elevator carrier is operated by the gathering drum.

The gathering drum is fastened to the main axle and is driven by both wheels. As a result of this construction, the gathering drum is raised and lowered with the wheels in passing over dead furrows and uneven ground. This insures all the hay being gathered irrespective of the condition of the ground. A wind break is provided, which prevents the hay from being blown from the carrier; the wind break is very effective and automatically adjusts itself to different conditions of hay. A tightening device allows the tension of the carrier to be properly adjusted. The Osborne loader is equipped with a fore carriage which carries a part of the weight of the loader.

This relieves the loader of the twists and strains which would result were no fore carriage used. It also makes it unnecessary for the loader to be lifted when being connected to the wagon, as the hitch may be moved to any position. It permits the driver to disconnect the loader from the wagon without requiring him to get down off the load. When the load is complete he simply pulls the rope which extends up to the top of the load from the hook on the fore carriage. When disconnected from the wagon the loader is held in an upright position by the fore carriage. Loader can be used with any height of farm wagon without any readjusting or changes.



THE NEY CLIMAX OPEN THROAT CARRIER.

With this carrier, it is possible to fill the mow closer to the comb of the roof than with any other carrier on the market. The throat has an exceptionally large opening, and the simple locking mechanism is so arranged that the lifting head or pulley locks directly on the sides or frame of the carrier, not depending on separate dogs or locks to hold the load. It is constructed and operated without the use of springs, and engages projections upon lifting pulley in a line with axis of pulley. This permits the pulley to swing very near the track and enables the carrier to work under conditions where any other carrier would necessarily fail.

CARBORUNDUM SCYTHE STONES

Do away with the grinding of a scythe altogether. They produce a clean, sharp edge and do it faster and easier than it could be done on the best grindstone ever made.

Carborundum Scythe Stones must not be classed with the ordinary scythe stones that you have been accustomed to. The old style stones are merely sandstone and are of very little use. They simply RUB the edge into shape—Carborundum CUTS it—cuts it fast and clean and puts an edge on your scythe that will be a revelation to you. **Price, 30c.**

REVERSIBLE HAY CARRIERS. For either Steel or Wood Track.

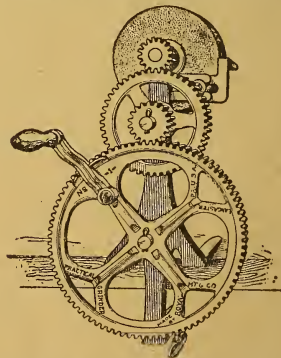
Light and Durable. Runs either way on the track without changing.

Price, \$4.50.

Ney Hay Car, steel or wood track	\$5 00
Climax Car, open throat	5 00
Double Harpoon Forks	1 50
Double Harpoon Alfalfa Fork	6 00
Steel Track per foot	13
Pulleys in Wood and Iron, each, 35 to 60	
Hanger Hooks, doz.	1 00
Brackets, doz.	75
Floor Hooks, each	15
Tedder Teeth, each	40
Horse Rake Teeth	35
Rope, best Manila, at lowest prices.	
All Steel Hay Tedder	45 00
Osborne Rake	25 00 to 30 00
New Yorker Horse Rake	22 00 to 24 00

We carry Haying Tools of all kinds.
Also Teeth for all Rakes and Tedders.

CARBORUNDUM GRINDSTONES



This has taken the place of all Grinding Stones where quick results are desired. Prices based upon size. \$2.00 and up

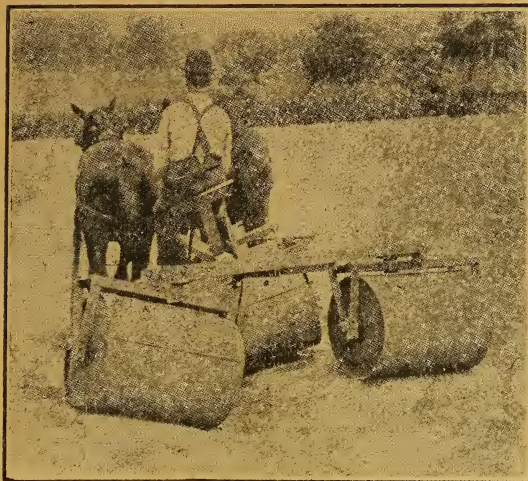
FLEXIBLE FRAME LAND ROLLER

Runs smoothly with light draft and turns square corners.

Rolls out dead furrows easily and effectively.

Follows uneven surfaces and rolls the hollows as well as the high places.

Rolls all the ground—no strips left between sections.



Rolling a Dead Furrow.

In this hillside field, sloping in two directions, a dead furrow was plowed to afford drainage.

This, after several years, has been widened and deepened to a shallow channel. No plan of rolling such a field with an ordinary rigid roller would give satisfactory results without much extra work. Notice how the Flexible Roller goes down the field adapting itself to the uneven surface and rolling every inch of ground. 3 section, 9 ft. steel frame, steel face, \$45.00.

Former Congressman Hon. John R. Clancy of this city, who owns a large farm near Skaneateles, N. Y., is using one of these splendid rollers.

INTERNATIONAL GAS ENGINES

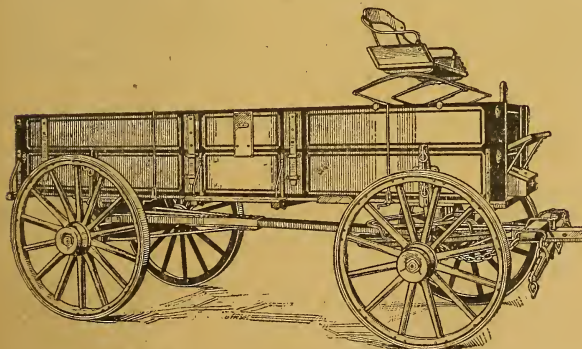
TO OPERATE ON GAS, GASOLINE, NAPHTHA OR ALCOHOL
AIR COOLED 1-HORSE POWER, WATER COOLED 2, 3, 4 AND 6-HORSE POWER

These engines are the same as the stationary type, but are mounted on substantial wood skids. This is a very desirable feature for farm work, as they can be moved from one job to another. We are offering our stock of these splendid new International Gas Engines at cost to close out our stock. This will make a splendid opportunity for those in need of it. We have in stock two, three, four and six horsepower engines. Put in an early order before these are sold out.

EMERSON BRANTINGHAM LINE

Mowers—Hay Loaders—Side Delivery Rakes—Manure Spreaders, Etc.

These celebrated and reliable Implements are known from the Atlantic to the Pacific, for their reliability and up-to-date features. Ask for booklet and special prices. A large stock is carried at our warehouse at 538 and 540 Canal Street.

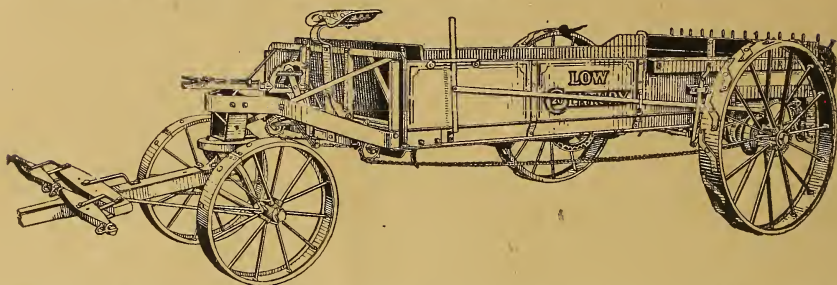


**Steel King
and**

Bettendorf Wagons

When you want longer or shorter stakes on a Steel King Wagon, all you have to do is to remove a bolt, adjust the stake to 8, 10, 12, or 14 inches in height, and replace the bolt. The stake is then just as solid as if it were built in place at that height. This is one convenience that every Steel King user enjoys. What do you think of it? The stakes are steel, built in the shape of an "I" beam, for which there's a reason; we'll tell you when you come in.

LOW 20TH CENTURY MANURE SPREADER



The Low 20th Century is a low down Spreader and has all the advantages that go with a spreader of low-down construction. However, the Low 20th Century has overcome the one great objection in low-down spreaders in that it has sufficient clearance space under the machine to allow it to be used advantageously any place from which and in which a load can be drawn. The driver absolutely gives no attention to the clearance feature. The Low 20th Century is high enough to pass over any obstruction that one would attempt to drive over under ordinary conditions.

The Low 20th Century is manufactured in four sizes. There is a size adapted to the small truck farm, as well as one for our largest farms.

The Low 20th Century Spreader is strong because it is built of steel; the controlling levers, and even the seat, are steel.

The only wood entering into the construction of the Low 20th Century is in the sides of the box, the apron slats, the tongue and beater rails. The Low 20th Century is built for service and durability; this is the reason for so much steel being put into it.

The Low 20th Century spreads evenly on the turns; it has a differential similar to that found in the hub of the Osborne Mower wheel, which allows one wheel to hold the pivot while making short turns without affecting the action of the beaters.

Syracuse, N. Y.

My Dear Mr. Ebeling:—The No. 2 Twentieth Century Low Down Spreader purchased of you is giving the University farm management great satisfaction. It is a positive pleasure to see it work. The draft is easy for such a machine and the distribution even and rapid.

Very respectfully,

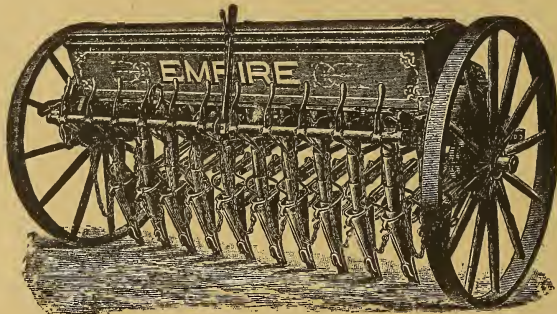
JAMES R. DAY,

Dictated.

Chancellor Syracuse University and Agricultural College.

EMPIRE GRAIN DRILLS

Empire Drills deposit the seed uniformly and cover evenly so that the field does not have thick and thin patches to cause unequal growth. This insures uniform results and a larger yield.



The Empire line is complete and comprises grain, fertilizer, and corn drills. When you buy an Empire Drill, you get one that has been built especially for your particular locality, and therefore is the drill best suited for your work.

Empire Fertilizer 11 x 7 Open Delivery Single Disk Drill, equipped with Internal Grain Feed and Star Fertilizer Feed

On the Empire Fertilizer Drill the quantity of fertilizer can be varied from 40 to 1,135 pounds to the acre. You can make this variation in feed without stopping the team. That is a drill feature worth having, but read on. Instead of depending upon the hopper for support, Empire drill grooves hold up the hopper. The Empire feed yoke is in one piece, therefore it is impossible for the pinions to get out of line. You know what that means.

Empire internal or double run grain feed cups sow all kinds of grain, as well as corn, large peas, Lima beans, red kidney beans, etc.; cup consists of but four parts, held by one bolt, which may be tightened to take up wear.

Price, 9 Tube, \$90.00; 11 Tube, \$100.00.

CROWN LIME AND FERTILIZER BROADCASTERS

CROWN Broadcasters are constructed principally to sow Lime; they also handle perfectly all kinds of fertilizers and other soil beneficiaries. All soil can be made more productive either by the application of some form of Lime to neutralize the free acid therein, or by the application of some other alkaline or in some cases an acid element to complete the neutral condition. Most plants are adapted by long practice to grow in soil that is approximately neutral. CROWN Broadcasters are specially adapted to distribute accurately any element which the soil requires.

CROWN Broadcasters are strong machines. Box rooms ten bushels. Force feed is attached directly on the main drive axle. No gears to freeze, strip or break. Ratchet wheels. Quantity can be changed instantly by one lever in center of hopper. CROWN Broadcasters are built to last. Price, \$38.00 to \$45.00.



FARMER'S

FAVORITE

COOKERS



Size boiler. Size Fire Box. Price.

No. 2	30 gal.	..22x24x13	1-2	..24	Inches	\$13 00
No. 3	40	..22x30x14		..30	"	14 00
No. 4	50	..22x36x15		..36	"	15 00
No. 5	75	..22x48x17		..48	"	17 00

The Farmers' Favorite is used for a great variety of purposes, such as cooking grain and vegetables for stock and poultry. Heating water for scalding hogs and poultry. Boiling spraying mixture. Heating water on wash day. Heating water for washing dairy utensils. Rendering lard and tallow. Boiling sorghum.

Heating drinking water for stock. Syruping down. Boiling cider. Preserving and evaporating fruit. Sugaring off. Boiling sap. In addition to the above, by using a top plate in place of the boiler it converts the cooker into a first-class stove for warming a milk room, hog house, poultry house, cellar or shop. Can you think of any other farm implement that can be used for so great a variety of purposes? The farm equipment is incomplete without one of these cookers.

Add \$4.00 for grate, for coal or coke

The Chatham Fanning Mill

The secret of big crops is planting Pure, Healthy, Fat Seed!

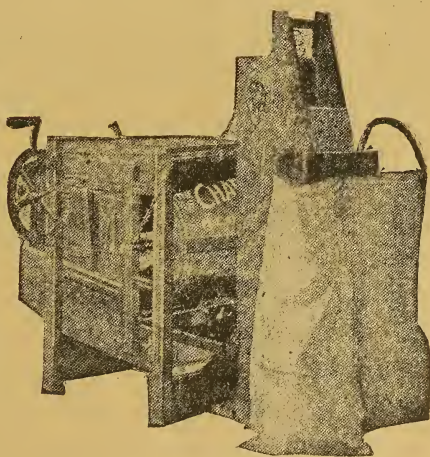
The way to get such seed is to own this magic machine—the Chatham Mill. It's the greatest money-making farm machine on earth.

GRAIN GRADER, CLEANER AND SEPARATOR

Handles Wheat, Oats, Corn, Flax, Buckwheat, Timothy Seed, Clover Seed—in fact, any grain or grass seed. Cleans, grades and separates all at one operation. Makes you independent—puts an end to planting foul, dirty seeds that grow poor crops and weeds. The "Chatham" handles 60 bushels per HOUR. Runs by hand or gas power.

Over 350,000 "Chathams" are now used on farms—they are recommended by every Agricultural Authority in the country. They make farming easier and a great deal more profitable. Price \$35.00.

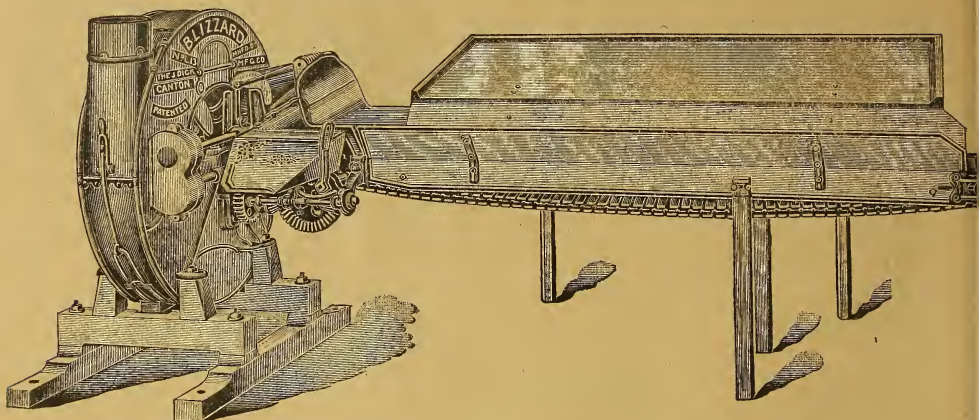
With Bagging Attachment, \$40.00



E. B. Ford, Branchport, Yates Co., N. Y., won the first prize on Red and White Wheat at the Syracuse State Fair 1914, and which was graded and re-cleaned with one of our celebrated Chatham Fanning Mills. "A word to the wise farmer is sufficient."

DICK'S NEW IMPROVED "BLIZZARD" CUTTER

With Superior Self-Feed Table. Also with Plain Feed Table



The Blizzard is an entirely new departure in feed and ensilage cutting machinery, and we feel safe in stating that owing to the numerous points of merit in this combined machine for cutting, splitting or shredding feed, and elevating it by means of a pneumatic conveyor and deflector, the Blizzard excels all others of its class.

The gearing on this improved machine is 50 per cent stronger and has much more wearing surface, while the shafts for feed gears are larger in diameter; in fact all the parts throughout are made much heavier and stronger, and can stand more strain and extended service than the former style "Blizzard." These machines are now constructed with a third bearing for main shaft; the important feature of this improvement is that it supports the main shaft on the outside of belt pulley overcoming the strain of the drive belt, and by this device it cannot spring the main shaft, which remains absolutely in line with the remaining two bearings. The feed table can be detached before removing from the machine, by simply lowering the rear end of the table and lifting it out of its fastenings. We claim that the "New Improved Blizzard" is ahead of all ensilage and feed cutters on the market today.

No.	Length of Knives	Capacity per Hour Green Ensilage	Steam Power Required	Speed Revolutions	With Traveling Table Price
M 9	11½ in.	4 to 6 tons	3½ to 5 H.P.	900 to 1100	\$110.00
M 11	14 in.	5 to 8 tons	4 to 7 H.P.	800 to 1050	135.00
M 13	16 in.	7 to 12 tons	7 to 10 H.P.	650 to 1000	170.00
M 15	18½ in.	9 to 14 tons	8 to 12 H.P.	600 to 950	215.00

Wagon trucks complete for mounting and transporting above cutters, for Nos. 9 and 11, \$35.00; for No. 13, \$35.00.

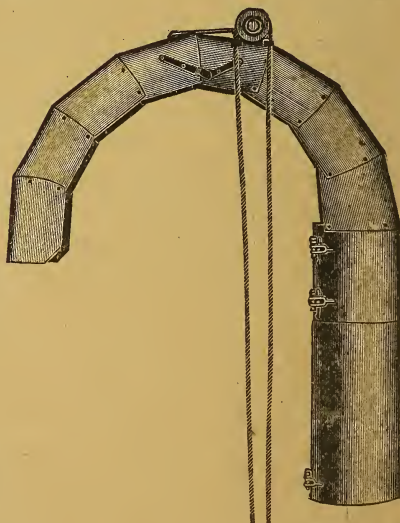
Price of cutter does not include pipe, angle clamp joints or deflectors.

For No. M 9	
6-inch Galvanized Pipe, per foot.....	\$.50
6-inch Deflector for end of pipe.....	8.50
For No. M 11	
7-inch Galvanized Pipe, per foot.....	\$.55
7-inch Deflector for end of pipe.....	8.50
For No. M 13	
7½-inch Galvanized Pipe, per foot.....	\$.60
7½-inch Deflector for end of pipe.....	8.50
For No. M 15	
8-inch Galvanized Pipe, per foot.....	\$.60
8-inch Deflector for end of pipe.....	8.50

With Flexible Distributing Pipe

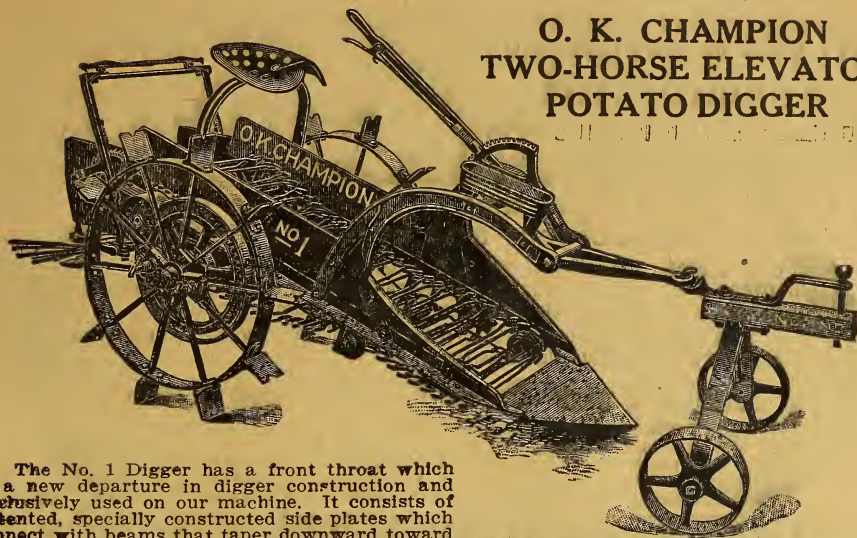
for Inside Silo

A new sectional distributing pipe used in connection with regular improved Silage Distributer. At end of the Distributer on two adjustable iron rods is attached a Hopper which in turn supports the sectional pipe. The device used for locking the pipe sections together is strong, durable, simple in construction, and what is of equal importance, makes the pipe very flexible. Price \$2.00.



Patent Deflector

O. K. CHAMPION TWO-HORSE ELEVATOR POTATO DIGGER



The No. 1 Digger has a front throat which is a new departure in digger construction and exclusively used on our machine. It consists of patented, specially constructed side plates which connect with beams that taper downward toward the front, curving outward along the upper edges and along the top flare. This makes the throat opening wider than the body of the machine, allowing the dirt to spread and lose itself more freely when first entering. It also forces the vines and weeds to slide up more easily and overcome the serious trouble of clogging. The inward extending base to which the shovel is bolted makes the opening absolutely rigid and strong.

This Digger is designed and built to embody every important point of construction which insures freedom from breakdowns, costly waits and expensive repair bills. It is adapted to the various duties which may be imposed upon it and will meet successfully the broad variance of conditions under which it may be worked. Its strength, simplicity, durability, capacity and economy are the vital factors which should receive consideration. It is strictly a Two-horse Elevator Digger; two ordinary horses will do the work with ease.

O. K. CHAMPION POTATO DIGGER NO. 2

The No. 2 Machine is in design exactly as the regular No. 1 Digger, varying only in size and dimensions, the elevator being two inches wider and ten inches longer, all other parts being built proportionately larger. This Digger has a very large capacity, the separating space being approximately fourteen square feet, which fact makes it especially adapted for heavy soil.

Dimensions:—22 inches between sides; equipped with patented front throat which allows the dirt to spread twenty-six inches; main wheels 35 inches high, fitted with removable lugs. The front truck is of the swivel type and makes turning to any angle or distance very easy.

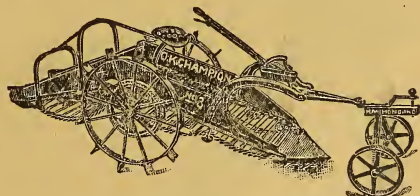
O. K. CHAMPION POTATO DIGGER NO. 3 WITH EXTENSION ELEVATOR A HIGH-CLASS, DURABLE AND EFFICIENT MACHINE

This Digger is constructed with the view of producing the best results with the least mechanism so as to avoid complication and cause as little friction as possible. It is amply strong for any soil or condition of field; its capacity sufficient, having over fifteen square feet of separating space. Its simplicity is one of the main features because it lessens the possibility of wear and breakage.

The Elevator is an endless link chain, constructed of $\frac{3}{4}$ -inch round, high carbon, crucible analysis spring steel. This is the best material that can be obtained for this purpose. The links of this chain are alternately raised and lowered, a feature original with O. K. Champion Diggers, which materially adds to the separating capacity without increasing the resistance and thereby greatly reducing the power requirements. Two sets of oblong sprocket agitators are provided which supply the chain with a continuous agitation while in motion.

The Main Wheels are 35 inches high, made of steel, with reinforced cast hubs and are fitted with removable lugs.

Dimensions:—32 inches wide between sides; equipped with patented front throat; main wheels 35 inches high, fitted with removable lugs. The front truck is of the swivel type and makes turning very easy. PRICES—No. 1, \$70.00; No. 2, \$85.00; No. 3, \$100.00.



Sept. 15, 1914.
F. H. EBELING:—

Dear Sir—The No. 1 Champion Potato Digger that I bought of you is doing such good work that I could not get along without it. It works perfectly and I would not be without it for \$100.

Clay, N. Y., R. F. D. 2.

GUSTAVE SCHULKE,

Prices subject to change without notice.

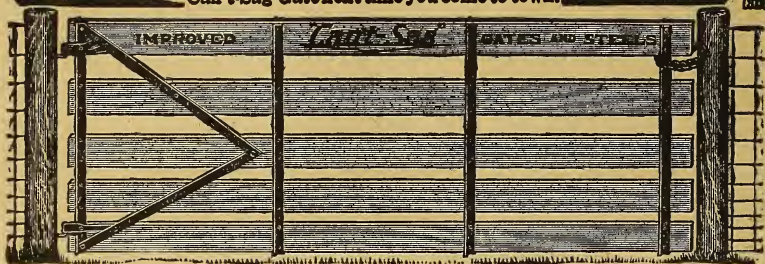
Replace Your Old Gates With The Low Priced "Can't Sag"

Now is the time to improve the looks and value of your farm by putting up Can't-Sag Gates. Notice how the boards are double-bolted in between 8 angle steel uprights. They can't sag or drag. Stock can see them plainly—won't break them down or twist them out of shape.

The first cost is no more than that of the clumsy short-lived all-wood gates, yet they last five times as long.

Build Your Own Can't-Sag Gates

if you prefer and save money. We sell the complete gates ready to hang or just the Gate Steels, which include 8 angle steel uprights, double truss brace, all bolts, hinges, lag screws, lightning socket-wrench and direction sheet. Come in and examine the Can't-Sag Gate next time you come to town.



CAN'T-SAG FARM GATE

This splendid farm gate does away with all the old gate troubles that have harassed farmers for many years. They will stay just as they are put up. Will not sag, always ready for business, made of best material, and is the only real dependable wood gate on the market. A trial of this gate will introduce a lot more of them in your neighborhood.

14-foot Gate, \$5.00. Steel metal parts for "Can't-Sag Gate," \$2.75.

INVINCIBLE STEP STOOL

Safe—Handy—Convenient

IN THE HOME

IT takes the place of a ladder in cleaning house.

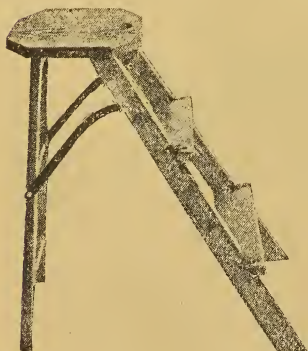
IT saves your strength by using as a Stool when preparing vegetables, ironing, &c.

IT slides under the Kitchen Table or hangs on the wall, when not in use.

AT THE STORE

IT is ready every time that you need to step up or sit down.

PRICE \$1.25



DANA'S STOCK LABELS

Stamped to order with letters and serial numbers.

For Cattle, Sheep, Hogs, Etc.

Cattle Labels, . . . 75c dozen, \$3.50 per 100

Sheep and Hog Labels, 50c doz., \$2.75 per 100

Punches for Cattle, \$1.50 each

" " Sheep and Hogs, . . . 1.25 each

Bull Nose Punch, 1.50 each

The above mailed you upon receipt of price named.



Banner Root Cutter

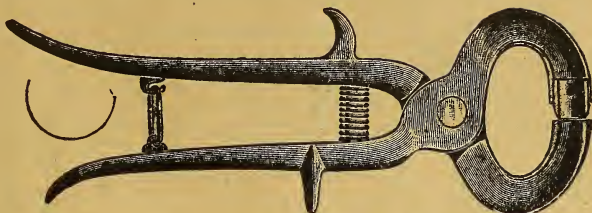
HAND AND POWER



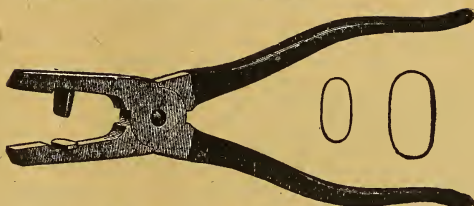
Has a capacity of 30 to 100 bushels per hour. One bushel per minute has been cut as a test, many times.

It saves the price of a cow, as they cannot choke when fed on roots cut by this machine.

No. 20 \$9.00; No. 30 \$16.00



Dana's Bull Nose Punch.



Dana's Cattle and Sheep Punch.

Hog Rings

15 Cents

Per Box.

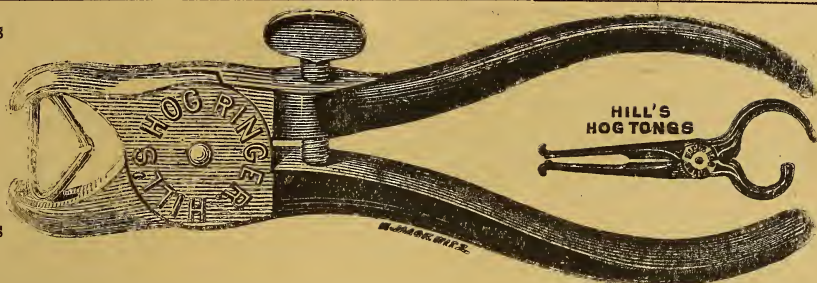
Hog

Ringer

35 Cents

Hog Tongs

65 Cents



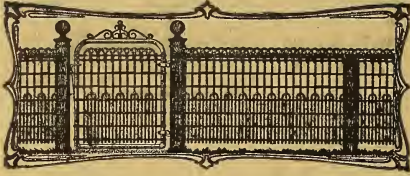
CASTINGS REPAIRED

Cast Iron, Steel and other Metals repaired and mended on short notice by the new welding process. Bring in your parts for repairing. This work can be done on short notice and old or obsolete machinery put into commission through this welding process, enabling farmers to make use of machinery that otherwise would have to be thrown on the scrap heap.

ERRORS

We sometimes make them, so does everyone! We will CHEERFULLY correct ours if you will write us. How can we correct them if you DON'T? Try to write to us good naturedly, but if you can't, write to us anyway. Don't kick to anyone else, or nurse a grievance. If we have ever made an error or offended you, it's only simple justice to us to let us know. We correct our mistakes gladly. If our methods don't appeal to you, help us with criticisms from your point of view. It is inevitable that in business letters hastily written should sometimes rub the wrong way. We may be awkward in expressing ourselves, but our goods are honestly sold and we aim to give everyone a square deal.

WAUKEGAN-CYCLONE SANITARY FENCING



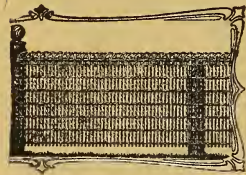
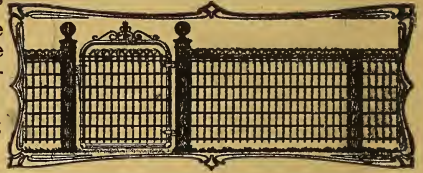
Style "F" is our most popular sanitary fence. Opens up the yard to fresh air and sunlight. Made of heavily galvanized wire. Pickets spaced $1\frac{1}{8}$ " apart at bottom, $2\frac{1}{8}$ " at top. Best heights are 36", 42" and 48". Other heights up to 84" furnished.

Price per lineal foot, Style "F"—36", 12c; 42", 13c; 48", 14c. 3-ft. Gate to match, \$3.00.

Style "L-Extra" is exactly like Style "F" except fewer pickets are used. Pickets spaced $2\frac{7}{8}$ " apart, making fence slightly cheaper. Other heights up to 84" furnished.

Price per lineal foot, Style "L-Extra"—36", 10c; 48", 11c; 48", 12c.

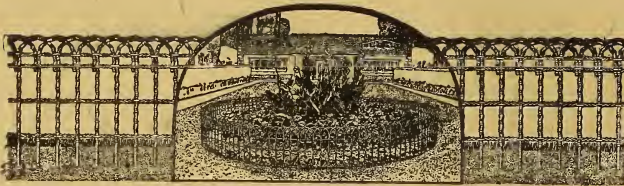
3-ft. Gate to match, \$3.00.



Style "S" is exactly like Style "F" except lower pickets extend clear to top of fabric. This is the closest mesh sanitary fence made. Pickets spaced $1\frac{3}{8}$ " apart from top to bottom.

Price per lineal foot, Style "S"—36", 14c; 42", 15c; 48", 17c.

3-ft. Gate to match, \$3.00.



Flower Guard

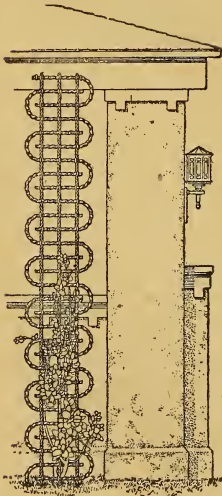
Keeps out dogs and chickens, protects the flowers, fits any shape or size of bed. Bottom of pickets left straight.

Price per lineal foot—16" width, 7c; 22" width, 8c.

Vine Trellis

Easily placed in position, cut to any length, fits any porch, used from year to year. Made in two widths.

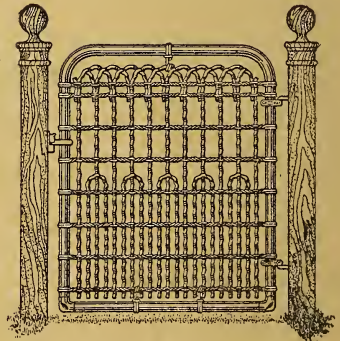
Price per lineal foot—18", 6c; 24", 7c.



Universal Walk Gate

Heavy, high-carbon, steel tubing frame, $1\frac{1}{8}$ " in diameter. Won't bend nor break. Close mesh fabric; fittings for wood posts. Regular width, 36", 42" and 48".

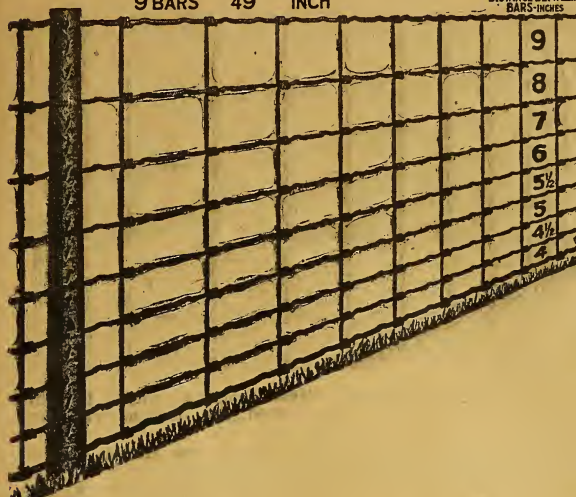
Price for 3-ft. opening, \$2.50.



"AMERICAN" SHEEP, HOG AND CATTLE FENCING

9 BARS 49 INCH

DISTANCE BETWEEN BARS-INCHES



This is a fence that fences and stays fenced. It stands for freedom from worry. With this fence you can rest easy and need fear no danger of your stock breaking out.

In this fencing we have every form of fences for sheep, hogs and cattle. It's made in two weights, medium and heavy.

Here's an especially interesting feature about this fencing—it's not only one of the best made but the cost is very small. The price was never so low as now. We have three cars in stock of the leading sizes. Ask or write for booklet.

The Lost Fence Stretcher is the only tool necessary for putting up the American Field and Hog Fencing. Every farmer should own this Stretcher. It costs only \$5.

A Wonderful Fence

There's no better fencing made for hogs, cattle, poultry or rabbits. It makes an ideal garden fencing. It's strong, thoroughly practical and more durable than netting. The light specifications are strong enough to turn stock.

This fencing comes in 13 to 21 bars, in 6 inch stays, 24 to 58 inches high, 43c to 71c per rod.

FENCING, POSTS and GATES

RETAIL PRICE LIST

FENCING Per Rod

635	Style A—12-inch.....	\$.35
726	Style A—6-inch.....	.35
832	Style A—6-inch.....	.52
845	Style A—6-inch.....	.57
845	Style A—12-inch.....	.45
949	Style A—6-inch.....	.63
949	Style A—12-inch.....	.49
845	Style D—12-inch.....	.64
949	Style D—6-inch.....	1.00
949	Style D—12-inch.....	.73
1558	Style E—6-inch.....	.72
1948	Style F—6-inch.....	.64
2158	Style F—6-inch.....	.71

STEEL FENCE POSTS

RETAIL PRICE LIST

LINE POSTS, 6 1/2 feet.....	\$.42
LINE POSTS, 7 feet.....	.48
LINE POSTS, 8 feet.....	.55
LINE POSTS, 9 feet.....	.65
CORNER POSTS, 8 feet.....	4.75
END POSTS, 8 feet.....	3.00
14-ft. Gate, Yankee, 50 -in.....	9.00
3-ft. Single Walk Gate, plain..	2.75
4-ft. Single Walk Gate, plain..	3.00

A COMBINATION TOOL

Here's the handiest tool a farmer ever can own. Stop and think. It drives, pulls, makes and saves staples. It's a wrench and pincer, nail puller and hammer. It cuts, splices, straightens and tightens wire. It removes trellises.

Saves time and wages; saves cutting hand; saves your temper, and it saves chasing cattle. You need one. Write now. It's only \$1.25

7--SEVEN TOOLS IN ONE--7

Price \$1.25



NEEDED BY 6,000,000 FARMERS.
It takes the Place of Button Pliers.



The above illustration indicates design 1258 of American Steel Fencing, which is eminently satisfactory for general farm purposes. The close spacing at the bottom will turn Hogs, also hold Sheep, Cattle and Horses.

We carry a full line of everything in the way of Sheep, Hogs and Poultry. Price very reasonable.

STEEL FENCING for Horses, Stock.

FENCING, POSTS AND GATES

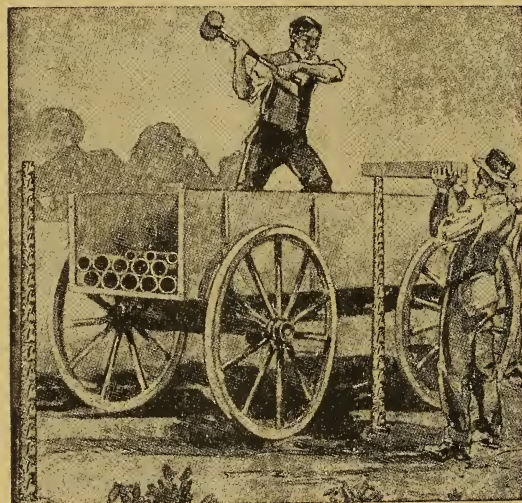
PRICE LIST

FENCING	Per Rod
635 Style A—12-inch.....	.35
726 Style A—6-inch.....	.35
832 Style A—6-inch.....	.53
845 Style A—6-inch.....	.57
845 Style A—12-inch.....	.45
949 Style A—6-inch.....	.63
949 Style A—12-inch.....	.49
845 Style D—12-inch.....	.64
949 Style D—6-inch.....	1.00
949 Style D—12-inch.....	.73
1558 Style E—6-inch.....	.72
1948 Style F—6-inch.....	.64
2158 Style F—6-inch.....	.71

STEEL FENCE POSTS

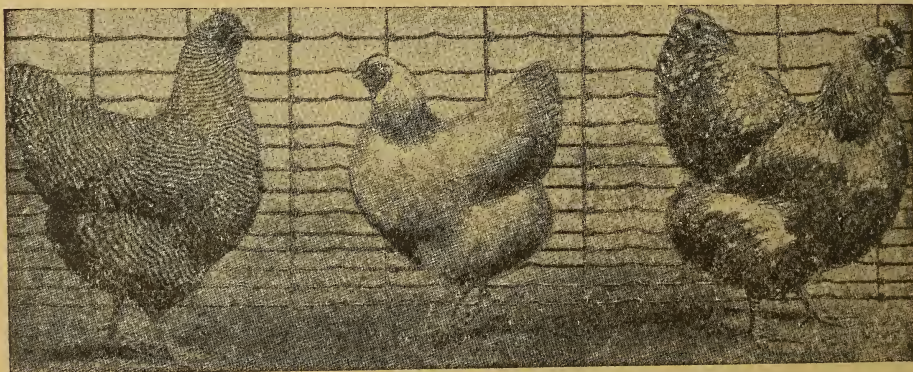
RETAIL PRICE LIST

LINE POSTS, 6 1/2 feet.....	.46
LINE POSTS, 7 feet.....	.48
LINE POSTS, 8 feet.....	.55
LINE POSTS, 9 feet.....	.65
CORNER POSTS, 8 feet.....	4.75
END POSTS, 8 feet.....	3.00
14-ft. Gate, Yankee, 50-in.....	9.00
3-ft. Single Walk Gate, plain.....	2.75
4-ft. Single Walk Gate, plain.....	3.00



There's no better fencing made for hogs, cattle, poultry or rabbits. It makes an ideal garden fencing. It's strong, thoroughly practical and more durable than netting. The light specifications are strong enough to turn stock.

This fencing comes in 8 to 15 bars, either in 6 or 12 inch stays, 20 to 50 inches high, 25c. to 45c. per rod.



MERIDIAN HAY RACK.

Manufactured of selected lumber and well bolted. Price, 16-foot, \$14.00 14 foot, \$13.00.

**OUR IMPROVED SLIP.**

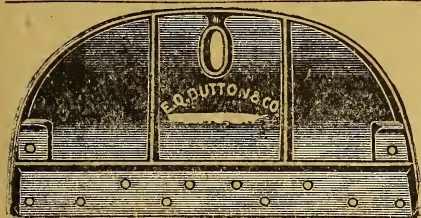
The above cut represents our Improved Slip, which any farmer can make by using our castings, which are shown in the front part of the cut. These castings are all finished and ready for the 8x6 inch maple runners. Since it is impossible to get Slip Runners sawed with the right sweep, any farmer will appreciate the benefit of our castings at a glance.

All complete like above cut, \$10.00.

Set of Shoes for above, \$3.25.

IRON HOG TROUGHS.

Made in four sizes 3, 4, 5, and 6 feet, 8 inches deep, 12 inches wide. Price 50 cents per foot.

**IRON STONE BOAT HEAD.**

A Simple, Complete and Inexpensive device whereby a Stone Boat can be made in a few minutes by using straight plank. One head will last for years.

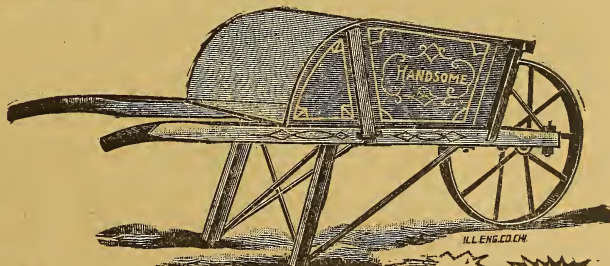
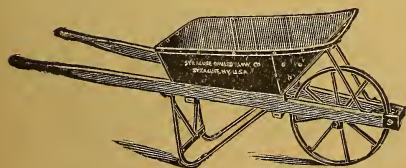
Price \$3.25 Each

GARDEN**BARROWS,**

\$4.50

to

\$6.50.

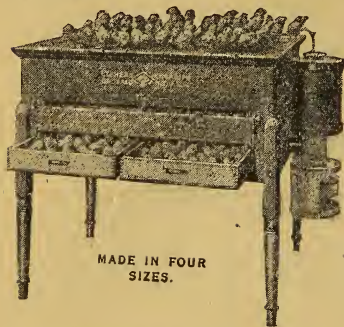
**STEEL TRAY BARROW**

The framework of this barrow is bolted together and is fitted with a steel tray and patent wood wheel with iron hub, specially adapted for stable work. **Deep Steel Tray, No. 1, \$7.00.** We also offer **The Common Wood or Paddy Barrow**, with iron or wood wheels, \$2.00 and \$3.00

All Prices liable to change without notice.

GENUINE CYPHERS COMPANY INCUBATORS PATENTED**Made in Three Styles—Eight Different Sizes**

For the season of 1917 we offer our customers the Cyphers Incubator Company's complete line of Incubators. These three styles of high class, guaranteed hatching machines, running through eight different sizes, represent all that is efficient, convenient and reliable in incubator construction. In buying a Cyphers Company Incubator you take no chance.



MADE IN FOUR SIZES.

390 Egg Standard Cyphers Incubator. Price Complete, \$44.00.

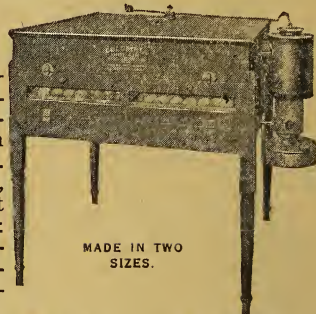
Incubator is guaranteed by the manufacturers to do first-class work in the hands of every purchaser who will give it a fair trial. Are built in four popular sizes and at prices as follows: 70 eggs, price complete \$16.00; 140 eggs, price complete \$25.00; 244 eggs, price complete \$37.00; 390-400 eggs, price complete \$44.00.

Standard Cyphers Incubators

These are machines that for twenty years have been recognized as the "Standard Hatchers of the World." Tens upon tens of thousands of them have been sold and are in successful use in every civilized country on the globe. They are used by more Government Experiment Stations, on more large, practical poultry plants, on more successful duck and egg farms, and by a larger number of foremost poultry breeders than all other makes combined. They are the last word to date in incubator building, not a penny being spared anywhere in their construction to make sure of their doing satisfactory work in all climes, under widely different conditions, in the hands of all sorts of people. They are built to hatch and to last. With ordinary care they should last an ordinary lifetime. Every Standard Cyphers

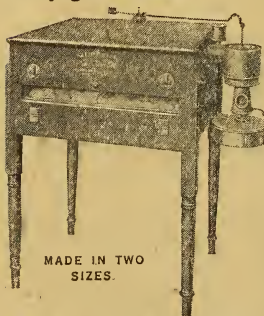
Columbia Hot-Air Incubators

Are built to meet the wide-spread demand for large-capacity, lamp-heated machines that can be sold at surprisingly low prices and yet be guaranteed to do high-class work. Have wooden cases, attractively finished in dark green, with brass trimmings and double walls. Seamless-bottom lamp bowls, best quality brass burners, zinc and steel Standard Cyphers toggle-joint thermostat and same regulating equipment as used on highest priced machines. Fume-proof, forced draft heater, asbestos covered and metal banded. Automatic in ventilation and embodies diffusive principle. Roomy chick nursery under egg trays. Are made in two sizes: 140 eggs, price complete \$18.00; 250 eggs, price complete \$25.00. Fully guaranteed.



MADE IN TWO SIZES.

250 Egg Columbia Hot Air Incubator. Price Complete, \$25.00.



MADE IN TWO SIZES.

130 Egg Superior Hot-Water Incubator. Price Complete, \$18.00.

Superior Hot-Water Incubators

These machines are exactly what the name says. They are heated by hot water, instead of with hot air, and are "superior" in every detail. The water boiler and tank (tubular) are of heavy-weight copper. Lamp has seamless bowl; burner is best on market. Incubator case is of wood, attractively finished in golden brown, with brass trimmings (hinges, buttons, etc.) and has double walls, with air space insulation. Are equipped with Standard Cyphers zinc and steel toggle-joint thermostat and knife-edge regulator. Have forced water circulation and are automatic in ventilation. Roomy chick nurseries. Are built in two sizes: 65 eggs, price complete \$13.00; 130 eggs (see illustration), price complete \$18.00. Fully guaranteed.

Prices subject to change without notice.

Write for Large Complete Catalogue of Cyphers Incubators and Brooders.

STANDARD CYPHERS COMBINATION BROODERS AND COLONY ROOSTING COOPS.

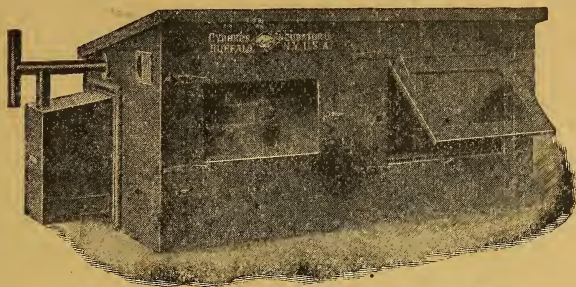
FOR 1917

Cyphers Unequalled Apartment Brooders and combina-

tion roosting coops have the same important advantages over all other makes that are possessed by Cyphers Company's 1917 incubators, in that they are fire-proofed and insurable, having the first fire insurance inspection label ever granted on a brooder.

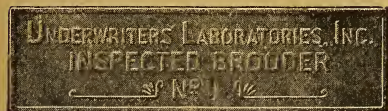
Cyphers 1917 Brooders, every size and style, are self-regulating, self-ventilating and vermint proof. The outdoor styles are useable also as colony coops for the growing chicks. They are easily and quickly converted into colony roosting coops by simply taking out the hover, which is made removable for that purpose.

FIRE-PROOFED, INSURABLE, SELF-REGULATING.



STYLE B OUTDOOR BROODER.

(Three apartments. Safest and most popular "Foster Mother" ever designed.)



DEMAND THIS LABEL YOUR SAFETY

Form of Brass Label to be found (in serial number) on every Cyphers Brooder. All sizes.

It has often been said of Standard Cyphers Incubators that

THEY MOTHER THE CHICKS BETTER THAN A HEN.

An Important Reason for this is found in the great practical advantage possessed by the entire line of Cyphers Brooders for 1917 in their self-regulating feature. For years the self-regulator was attached only to the highest priced Cyphers Brooder (Style C), but it was so well received that now it is attached to all Cyphers Company brooders. It automatically regulates the heat in the brooder underneath the hover at all times, whereas in brooders without a regulator the heat has to be governed by a continuous watching of the lamp and turning the wick up or down whenever more or less heat is required.

In addition to this unequalled line of brooders, we offer separately the Cyphers Company's world's challenge Adaptable Hover. This machinery-made, all-metal, guaranteed fire proof heating and brooding device is suitable to be used anywhere that heat is required for brooding chicks or ducklings. It can be used in a roosting coop, colony house, shed, hen house, barn or other building with or without any additional enclosure for the chicks, or in a large goods case or organ or piano box.

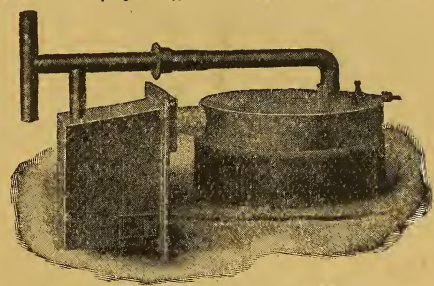
Is pronounced by thousands of users to be the best device thus far invented for heating home-made brooders. Recommended especially for use in long brooding houses, one hover for each pen. Adaptable hover is complete in itself, bears insurance label as a separate device, and is safe to use anywhere. Weight, boxed for shipment, only 40 pounds.

Sizes and Prices of Cyphers Adaptable Hover and Brooders.

Free on Board Cars, Syracuse, N. Y.

Adaptable Hover, capacity 75 chicks,	\$10.00
Style A, Two Apartment Outdoor brooder, capacity 75 chicks,	15.50
Style B, Three Apartment Outdoor Brooder, capacity 100 chicks,	19.50
Style C, Three Apartment Outdoor Brooder, capacity 100 chicks,	21.00
Style D, Two Apartment Indoor Brooder, capacity 75 chicks,	14.50

Prices subject to change without notice.



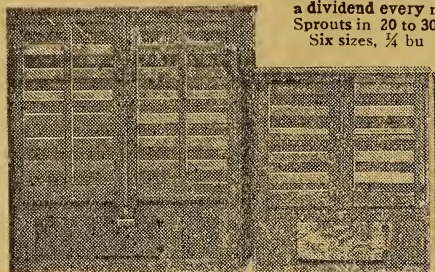
ALL METAL ADAPTABLE HOVER.

(Self-Regulating and Bears Insurance Label as Separate Device.)

DOUBLE QUICK GRAIN SPROUTER

THE PERPETUAL POULTRY SILO—Grows Green Feed While You Wait
The First, the Original, the Pioneer of All Grain Sprouters

Adapted to every climate, altitude, and latitude; for use in the cellar, kitchen, back porch, or a box in the yard. Sprouted oats brings the eggs and the Double Quick brings the oats. Makes 2 to 4 bushels green feed from one of grain. Pays a dividend every month in the feed it grows and the eggs it brings. Sprouts in 20 to 30 hours and forces growths of an inch to two a day. Six sizes, $\frac{1}{4}$ bu to 8 bu., a few hens to 1,000.

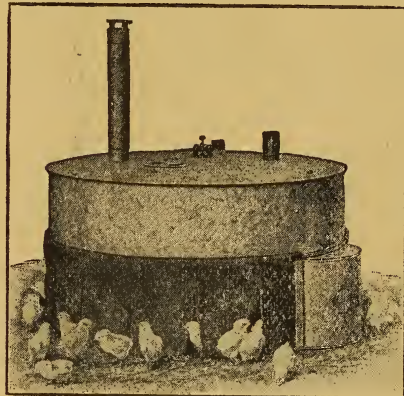


Prices \$8.50 and upward



CYCLE HATCHERS, BROODER--HATCHERS

1 Cycle Hatcher, with thermometer,	\$ 6 50	1 Brooder Hatcher, with thermometer,	\$ 8 00
2 Cycle Hatchers, " " "	12 25	2 Brooder Hatchers, " " "	15 75



Shows the Cyphers Company Portable Hover in Use on Floor of Poultry House. Chicks at all times are on a level with surrounding floor.

CYPHERS PORTABLE HOVER

Self Regulating. Indoor Use. \$9.50

The self-regulating and self-ventilating Portable Hover, illustrated herewith, was invented by Cyphers Incubator Company in 1910, and has been well tested during three seasons of practical use on the Cyphers Company Poultry Farm. It is the only Self-Ventilating portable brooding hover thus far invented and we guaranteed it to be the best device on the market.

As its name indicates, the Cyphers Portable Hover can be picked up at any time—hover, lamp-box, lamp, regulating device, all complete—and moved to a new spot or any place the operator may desire and the device will continue in operation right along. The lamp need not be removed at this time nor the wick so much as turned down. Is very convenient for cleaning and for moving the chicks from one location to another.

This Hover has a rated capacity of seventy-five newly hatched chicks, or of fifty chicks that are

ten days to six weeks old.

It will Hover comfortably one hundred newly hatched chicks.

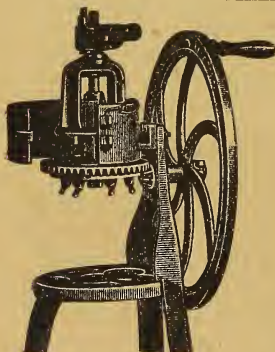
MANN'S CELEBRATED BONE CUTTERS

We offer the best Bone Mill on the market. Fully warranted against breakage for two years. The only machine that will cut green bone fine enough for Bantams and little chickens

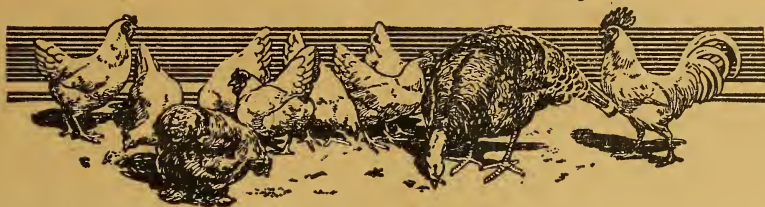
Price List of Mann's Green Bone Cutters

No. 5 C	with Crank Handle.....	\$ 7.00
No. 5 B	with Balance Wheel.....	9.00
No. 5 B M	with Balance Wheel and Iron Stand.....	11.50
No. 7	with Balance Wheel and Iron Stand.....	13.50
No. 7½	Hand and Power.....	18.00
No. 9	Hand and Power.....	21.00

All Prices liable to change without notice.



PRATTS Poultry Regulator and Remedies, Baby Chick Food, Animal Regulator and Remedies *Satisfaction Guaranteed or Money Back*



Healthy birds and lots of eggs, the two big things in poultry raising, are made certain by giving

Pratts Poultry Regulator

100-lb. bags, \$9.00; 25-lb. pail, \$2.50; 12-lb. pail, \$1.25; pkgs., 50c and 25c.

It builds up the vitality, insures sound digestion, sharpens appetite and prevents disease, thus putting birds in condition for heavy egg laying and winning blue ribbons.

Pratts is the original Poultry Regulator of America and is in use by the most successful poultry raisers everywhere.

When regularly used, hens lay throughout the year.

It will prevent chicken cholera, gapes, roup, rheumatism, expel worms, prevent leg weakness and egg eating. It will greatly improve turkeys, geese, ducks, pigeons and guineas—insuring quick growth and keep them free from disease.

Don't let ROUP cut your profits. The sure and easy "ounce of prevention" against this dangerously contagious disease is

Pratts

Roup Remedy

Tablets or Powder, \$1.00, 50c, 25c.

Quickly absorbed by the blood, purifies the system, reduces fever, allays inflammation. The safe remedy for roup, colds, catarrh and all bad weather diseases.



Get rid of lice on your poultry, in nests, dust baths, incubators and elsewhere in a day's time by using

Pratts Powdered Lice Killer

40c and 25c.

Effective, non-poisonous, non-irritating. May be used wherever a powder is suitable. A splendid deodorizer.

It quickly and thoroughly kills all lice on little chicks, big chicks, setting hens and incubator chicks. It rids horses, cattle, hogs, dogs, and cats of lice, and destroys ticks on sheep. It destroys insects and bugs on vines, plants and flowers. A valuable deodorizer and disinfectant for all poultry houses, barns, stables and dwellings. Drives out moths from closets, furniture, carpets and clothing.



There is a Pratt Remedy for nearly every curable poultry disease.

When baby chicks come, keep them healthy and growing and bring even the weak ones along by feeding

Pratts Baby Chick Food

14 lbs. for \$1.00. Packages 50c and 25c.

A largely predigested baby food for baby chicks. Guaranteed to raise every livable chick. Costs a cent a chick for three weeks. Prevents leg weakness, white diarrhoea, "pasting up" and other chick diseases.



To protect your chicks from white diarrhoea, the most destructive of all chick diseases, it is only necessary to give

Pratts

White Diarrhoea Remedy

50c and 25c

in the drinking water from the first drink. This remedy has saved many dollars' worth of chicks for poultry raisers. You can depend on it.



If poultry keepers would regularly spray the chicken houses, roosts, dropping boards and utensils with

Pratts Poultry Disinfectant

only \$1.00 a gallon, most all their troubles would vanish. This great disinfectant is a real wonder-worker in the poultry yard.

Three times as powerful as crude carbolic acid. A sure deodorizer, germicide and liquid lice killer. Use it for roup, colds, and other contagious diseases.

We want you to notice the price, \$1.00 per gallon, making it the lowest priced disinfectant on the market. Others of equal strength are usually sold for \$1.50 per gallon.

Half gallon, 60c; quart, 35c.



POULTRY SUPPLIES

Beef Scraps...lb. 3½c; 100 lbs.	\$3.50
Crushed Shell...lb. 1c; 100 lbs.	.60
Bone Meal, raw...lb. 3c; 100 lbs.	2.75
Alfalfa, Mealed...lb. 3c; 100 lbs.	2.00
Bowker's Animal Meal, 10 lbs.	
35c; 25 lbs. 75c; 50 lbs.	\$1.50;
100 lbs.	2.75
Bands, Dbie. Clinch...doz. 15c; 100	.65
Bands, Adjustable...doz. 15c; 100	.65
Bands, Pigeon Leg...doz. 15c; 100	.65
Clover Cutter, without stand...	8.50
Clover Cutter, with stand...	18.50
Boxes for grit and shell...	.50
Caponizing Instruments (post-	
paid).....\$2.50, \$3.00, 4.00	
Cement (Tar Paint for Roofs)	
.....gal. 50c; 3 gal.	1.25
Coop, New Model Brood.....	3.50
Charcoal, Nodi, 3 sizes, fine, me-	
dium, coarse, 2-lb. carton 10c;	
50-lb. sack.....	1.00
Corn Shellers (Iron King).....	1.00
Candle, Sulphur Fumigating.....	.15
Cyphers Foods.....At Market Prices	
Chick....."....."	
Forcing....."....."	
Scratching....."....."	
Developing....."....."	
Laying Mash....."....."	
Banner Root Cutter, No. 7.....	5.00
Fancier's Root Cutter.....	1.00
Root Cutter, Pulley and Crank,	
No. 26.....	12.00
Root Cutter (crank only).....	9.00
Egg Cartons (Paper), 12-egg,	
.....doz. 10c; 100 doz. 1000	.75
Humpty Dumpty Egg Cases, 6	
doz. size, 80c; 12 doz. size.....	.35
Egg, Porcelain Nest, doz.....	.25
Eggs, Medicated, doz.....	.25
Dry Mash or Chicken Chowder	
.....lb. 3c; 100 lbs.	2.50
Food Hoppers, Dry—	
Boston and Favorite.....	1.00
Cyphers and Sexton.....	.75
Fountains, Wall, 1 ga. 50c; 2 ga.	.75

Fountains, Drinking, galv. iron,	
small, 20c; medium, 25c; large,	
35c; special duck.....	.50
Fountain, Warm Water Drinking	1.50
Fencing, Hexagon—2-inch mesh,	
made 12, 18, 24, 30, 48, 60	
and 72 inches wide; 1-inch	
mesh, made 12, 18, 24, 30, 48,	
60 and 72 inches wide, each	
roll contains 150 lineal feet	
.....Market Prices	
American Poultry Fence, a fence,	
not a netting—2158, per rod,	
45c; 1558 per rod.....	.40
Grit, Crystal Granite, 3 sizes	
.....lb. 2c; 100 lbs.	.75
Grit, Foust Health.....	
.....lb. 3c; 100 lbs.	2.00
Gun, Jumbo Powder.....	.25
Grains—Corn Cracked, Canada Peas,	
Wheat, Buckwheat, Millet.....	
.....Market Prices	
Heneta.....lb. 2c; 100 lbs.	\$2.00
Knives, Poultry Killing, each..	.50
Markers, Phila. Poultry, each..	.25
Mill, Tennessee Grinding.....	2.00
Extra Grinders for same, each	.25
Mill, Oriole Farm and Grist, No.	
2½.....	25.00
Mill, Balance Wheel Grist.....	2.25
Moisture Device, Automatic.....	1.50
Nests, Wire, each.....	.15
Lee's Lice Killer.....	
.....1 qt. 35c; 2 qts. 60c; 4 qts. 1.00	
Nests, Earthen Pigeon, 15c; dz.	1.75
Philadelphia Poultry Marker...	.25
Poultry Foods—	
Pratt's, pkg.....	.25c and .50
Lee's Egg Maker, pkg. 25c and 2.00	
Powder, Lambert's Lice, 5 oz.	
10c; 15 oz. 25c; 48 oz. 50c;	
100 oz.....	1.00
Remedies, Cyphers Poultry, case	
complete \$2.00; single vials..	.25
Roup Cure, Conkey's, 25c, 50c, 1.00	
Roup Cure, Rust's.....	.25c, .50

Roofing, Durable, 2 ply, per	
square, \$2.00; 3 ply, per sq., 2.25	
Each roll contains 1 or 2 squares.	
Roofing Caps, tin, per lb.....	.10
Roofing Nails, per lb.....	.05
Shells, Oyster, 100 lbs.....	.60
Special price for larger lots.	
Spray Pumps, for spraying white-	
wash.....\$3.00 and 4.50	
Sprayers, Compressed Air, galv.	
iron.....	\$2.50 to 7.75
Sprayers.....	.25c to 1.00
Staples, Fence, per lb.....	.05
Staples, Poultry Fence, per lb..	.10
Salt Cat.....brick 10c; doz.	1.00
Add 20c extra for postage.	
Thermometers, Incubator.....	.60
Thermometers, Brooder. 35c and	.50
Testers, X-Ray Egg.....	.25
Trays, Pedigree Egg, per pair	
.....No. 2, \$4.00; No. 3 4.75	

BIRD SEED AND SUPPLIES

Canary, Hemp, Rape, Millet,	
Mary, Unhulled Rice. Market Prices	
Sunflower Seed, lb. 10c; 3 lbs. \$.25
Shepard Song Restorer, bottle..	.25
Marshall's Song Restorer, bottle	.25
Mocking Bird Song Restorer, bot	.30
Bird Gravel.....pk. 10c; 3 for..	.25
Cuttle Bone, oz.....	.05
Pepper Seed, oz.....	.10
Lettuce Seed, oz.....	.05

PIGEON & DOVE SUPPLIES

Canada Peas, Choice Wheat,	
Yellow Corn, small kernels,	
Kaffir Corn, Millet, Hemp....	
.....Market Prices	
Foust's Health Grit, lb. 3c; 100 \$2.00	
Dog Biscuit.....lb. 10c; 3 lbs.	.25
Dog and Puppy Biscuit, Spratt's,	
Old Grist Mill, Milk-Bone in	
bulk.....lb. 10c; pkg.	.25

BOSTON DRY FOOD HOPPER

The Food-Saving, Rat-Proof Hopper That Made Dry-Feeding of Poultry a Success.

The use of these hoppers will positively save their original cost every week in the case of adult fowls and every month or less in the case of chicks. Besides this they will help greatly to keep your fowls and chicks in a healthy condition by insuring them clean food entirely free from filth of any kind. Every poultryman will appreciate this feature.

Prices:	Large Hopper for Dry Feed, holds ½ bu., each.....	\$1.25
	Small Hopper for Beef Scrap, Grit, etc., holds 1 peck. 1.00	
	Long Chicken size, holds 1 peck.....	1.50
	Short Chicken size, holds ½ peck.....	1.10

Hopper is locked for the night by a hook in lower end, making it absolutely rat-proof.



RAT CORN



Will Exterminate Rats and Mice from your premises in a safe, sane and sanitary manner.

NO ODORS OR SMELLS. It mummifies them. No matter where they die they simply DRY UP. Positively do not smell. Rat Corn is a new and scientific discovery, and without a doubt the greatest rat destroyer in the world; the only one that kills rats without any bad, dangerous or disagreeable effects. A trial will convince you, 25c, 50c and \$1.00 per can; 6-lb. pail \$5.00 express prepaid.

Red Wing Insect Powder

In the New Bellows. Insect Powder and Bellows combined ALL FOR TEN CENTS

RED WING is the Best Insect Powder that can be procured and once you try it you will use no other. For the destruction of Roaches, Bed-Bugs, Fleas, Moths, Ants, Flies, etc.

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